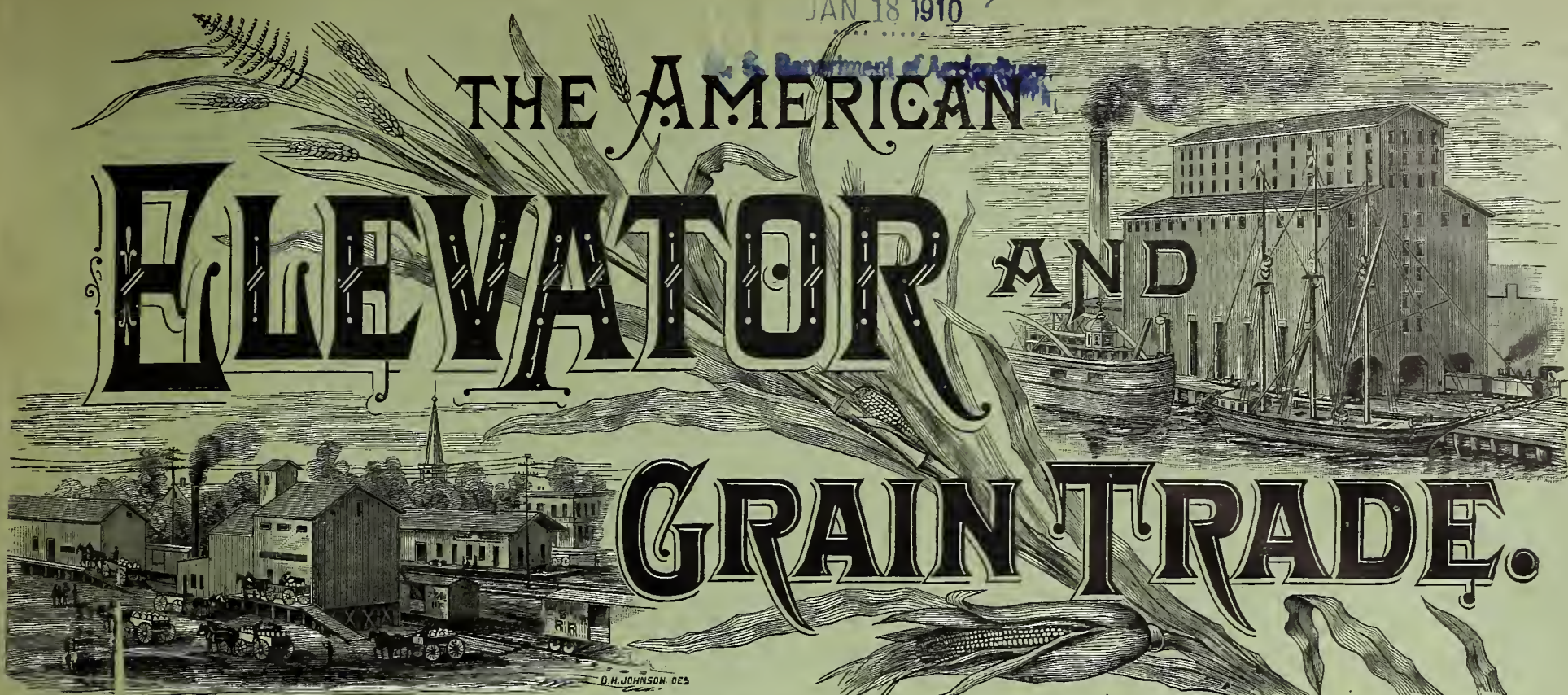


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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. & CO.

{ VOL XXVIII.

CHICAGO, ILLINOIS, JANUARY 15, 1910.

No. 7.

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in the December edition of this publication that all of the Transmission Machinery and Belt Conveyors in the big Washburn-Crosby Elevator at Buffalo (built by Jas. Stewart & Co.) was furnished by us? This is but one of a great many.

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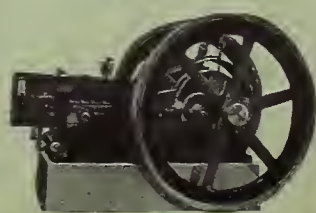
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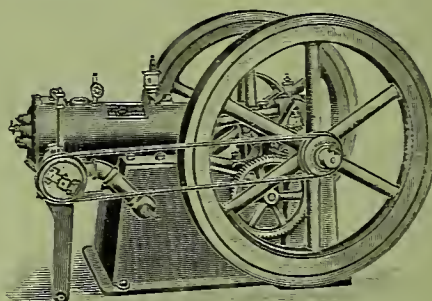
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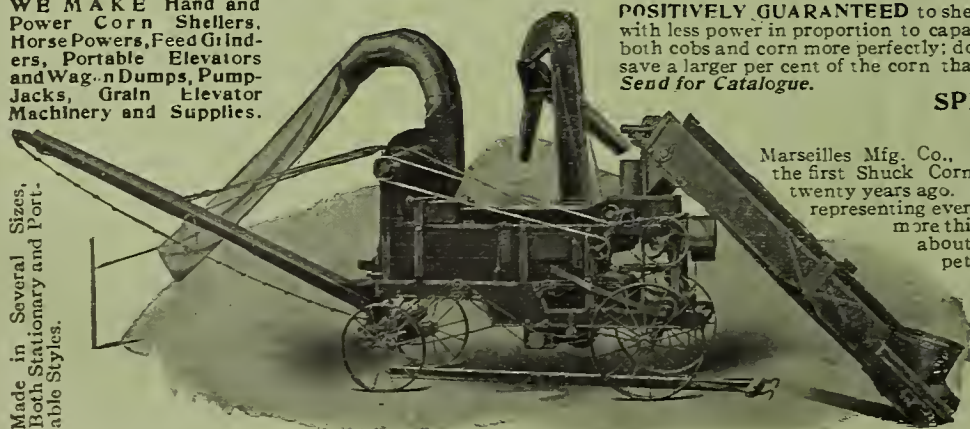
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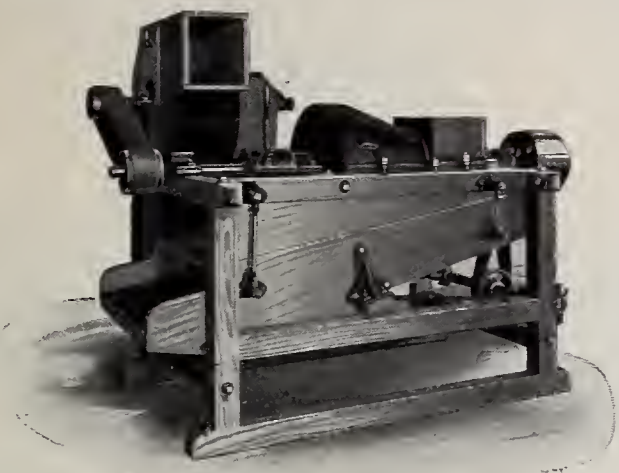
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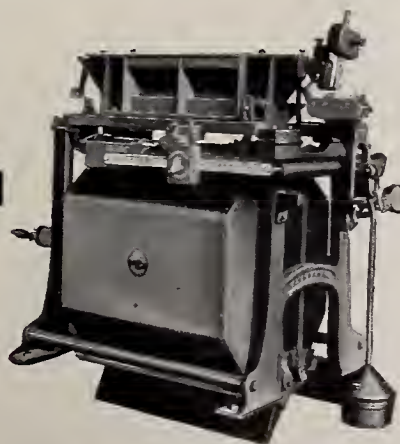
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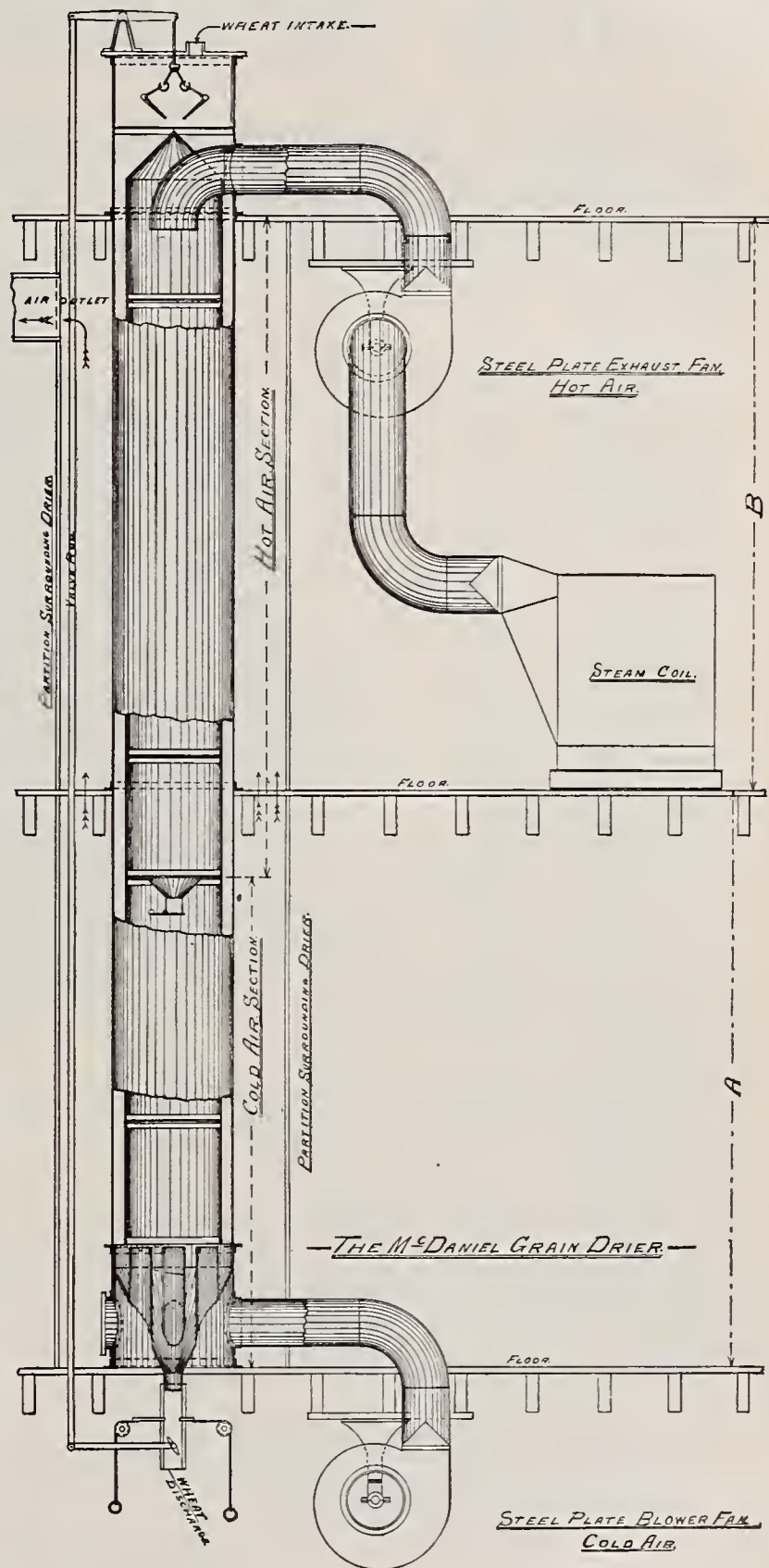
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Read what a user
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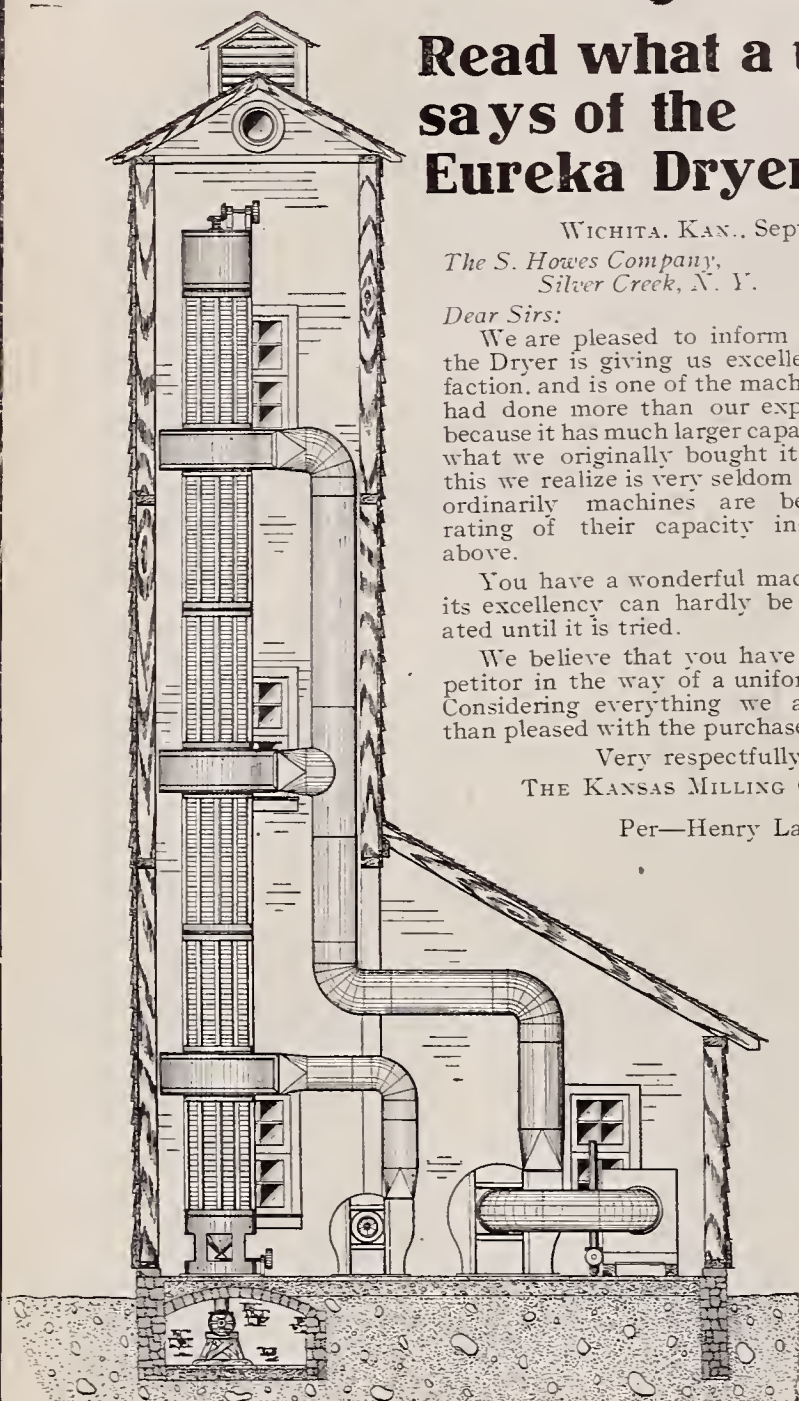
We believe that you have no competitor in the way of a uniform dryer. Considering everything we are more than pleased with the purchase.

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Per—Henry Lassen.

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Complete with Hot and Cold Air Fans, Heater, Steam Trap and Air Piping. Automatic and Continuous in operation as Dryer and Cooler. Total Height, 49 feet.

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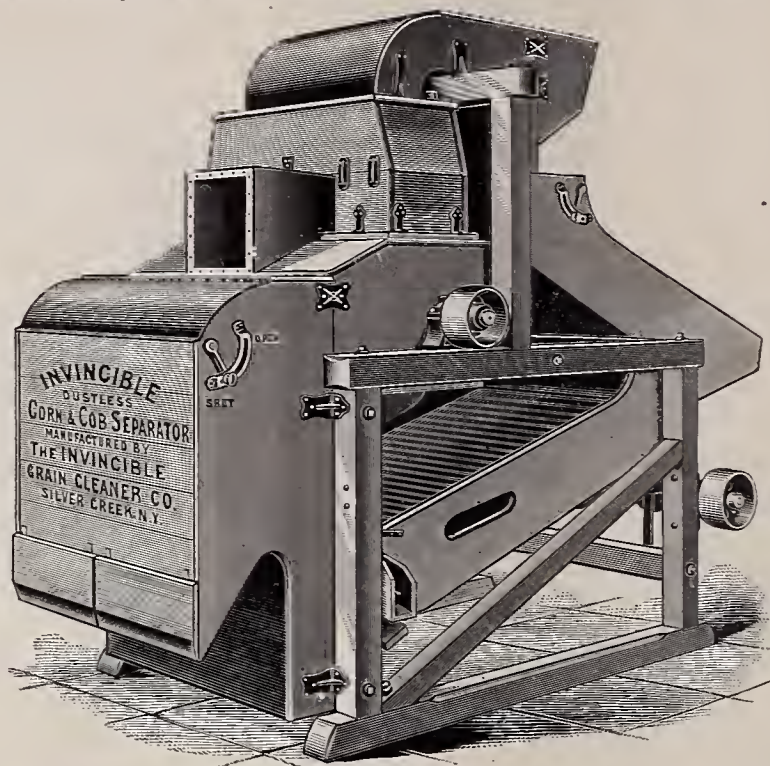
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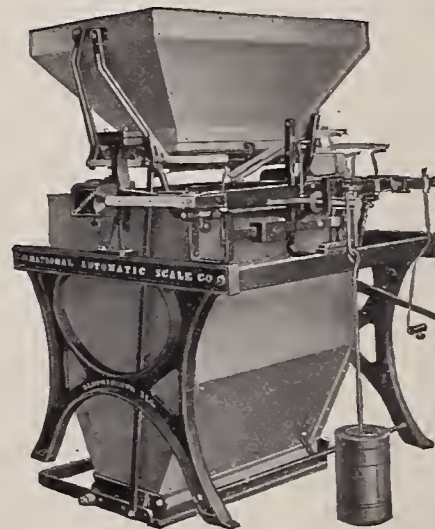
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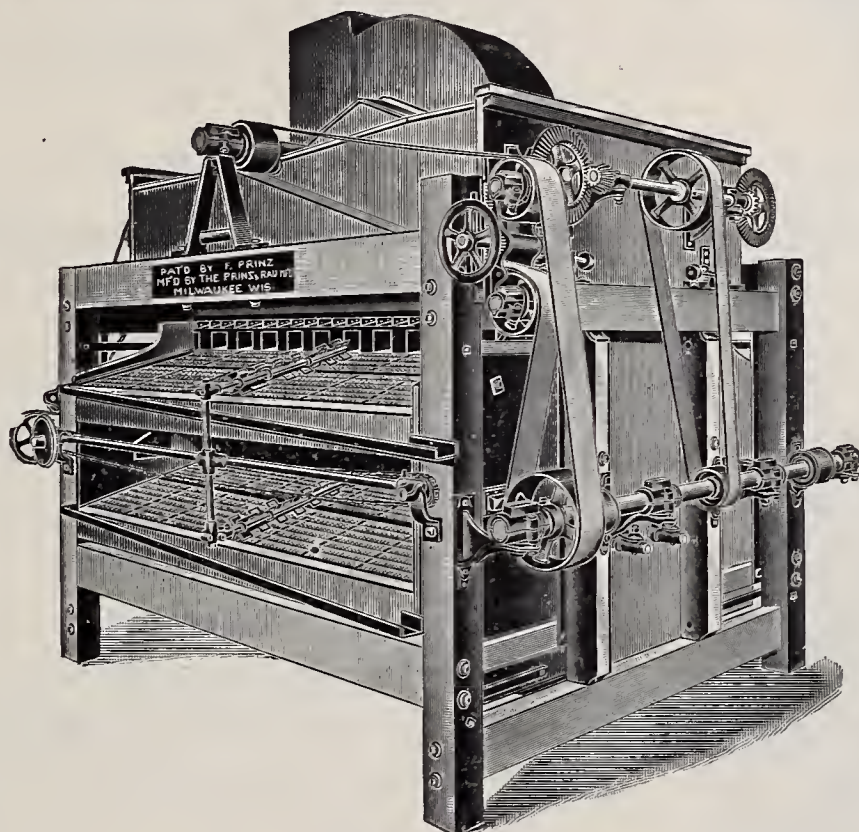
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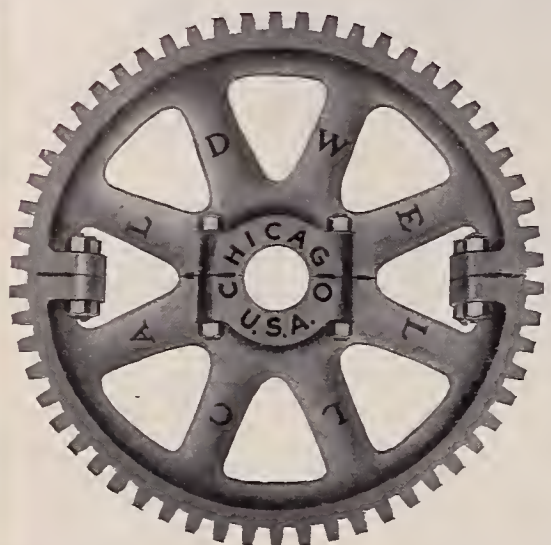
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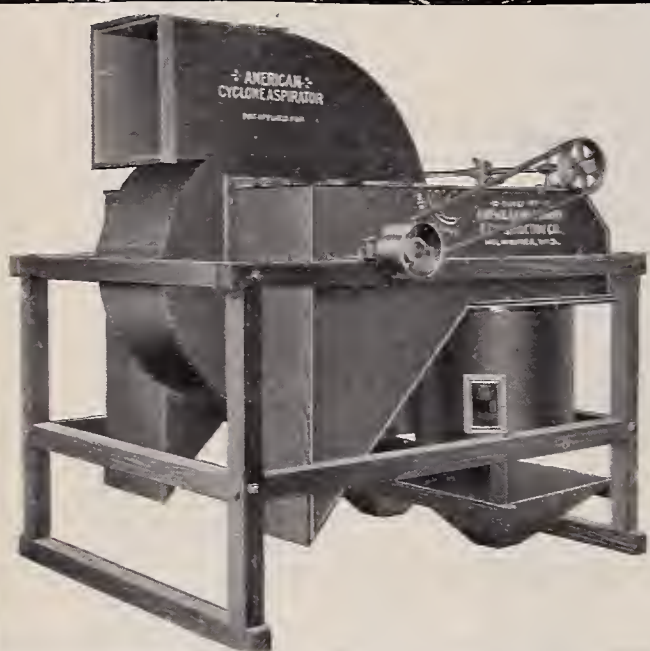
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That is the reason why every grain dealer, miller or maltster who wants his grain absolutely clean needs an **AMERICAN CYCLONE ASPIRATOR.**

We are also the makers of the American Grain Cleaners and Separators.

American Machinery & Construction Co.
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Just You Get Wise to This Stunt

Cobs and
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To The
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Richardson
Automatic
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We have realized that the feed chute of the Automatic Scale is its throat, and have made this throat of such design that

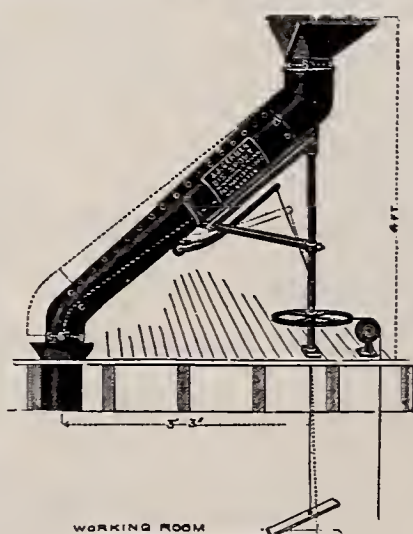
It Can Swallow Cobs and all Manner of Rubbish and NEVER CHOKE.

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Good Spouts Reasonable Prices

That is what you get when you buy the

Gerber Improved No. 2 Distributing Spout

Will prevent mixing of grain. Can be operated from working floor. I make a specialty of elevator and mill spouting. For particulars write

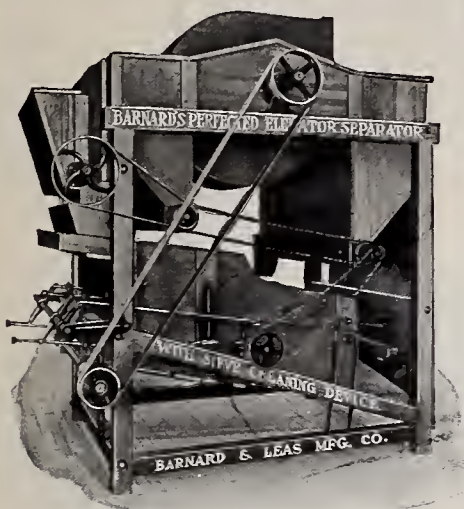
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We make them for all purposes.

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Our **Victor Corn Sheller** and other line of shellers and cleaners are too well known to need mention.

Our line of Ball Bearing Feed Mills will save over 50% of your power.

We also make Grain Dryers and Steamers of all capacities, Sifters, Reels, Aspirators, Purifiers, Packers, Dust Collectors, etc.

Complete machinery equipments furnished for Grain Elevators, Malt Houses, Cereal, Feed, Flour and Cement Mills.

Our latest circulars describe the above machines fully and can be had for the asking.

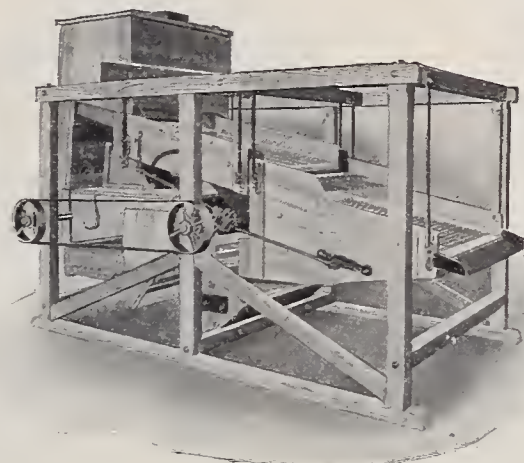
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THE B. S. C. CHAIN FEEDER AND DRAG



for feeding elevator boots and shellers, any capacity, any distance, automatically. Handles all kinds of grain without waste or mixing.

The ONLY WAY to feed a sheller.

THE U. S. CORN SHELLER

Patented Oct. 17, '05.

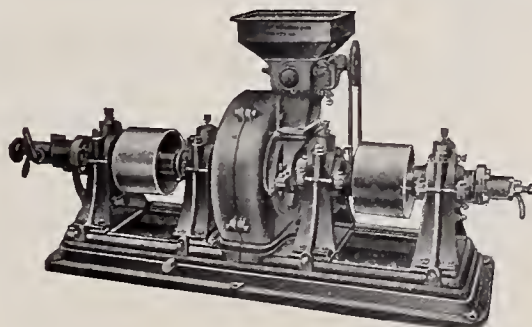
No pit or lower hopper. Cheapest installed. Quickest repaired. Our new Screw Adjustment can be used while sheller is full of corn and running. Shells clean, saves cobs. TRY IT.

Write for our catalog or you may miss something good



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The Monarch Attrition Mill

It will enlarge your grinding capacity without increasing the power consumption.

AND WE BACK IT UP WITH A GUARANTEE THAT COVERS EVERYTHING.

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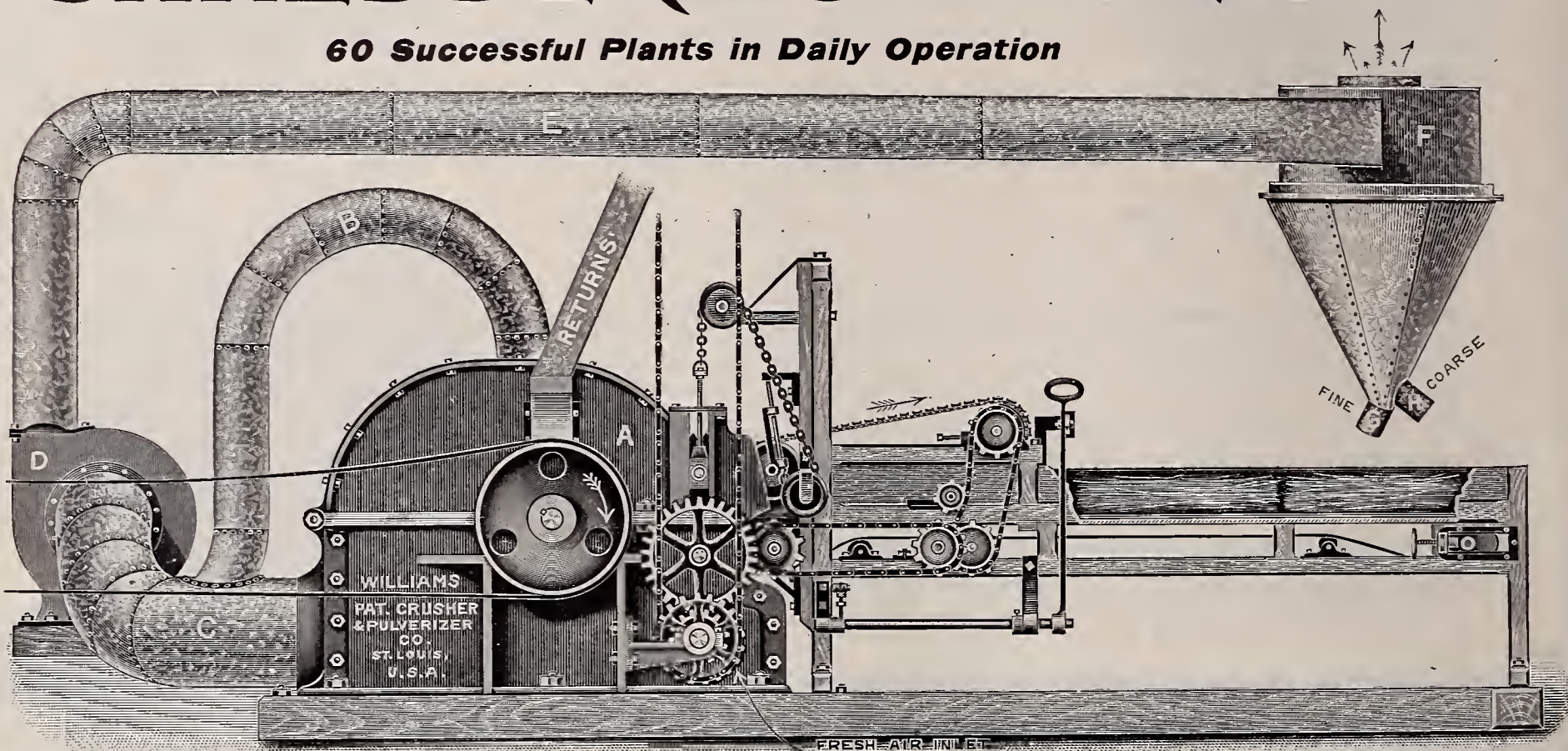
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SPROUT, WALDRON & COMPANY

Northwestern Branch, 301 Corn Exchange Bldg. Box 320, Muncy, Pa.
MINNEAPOLIS, MINN., C. H. Mohr, Mgr.

WILLIAMS PATENT COMBINED HAY AND STRAW CUTTER SHREDDER AND GRINDER Made in 6 Sizes

60 Successful Plants in Daily Operation



THE ONLY VERSATILE FEED GRINDER EVER PRODUCED

They will reduce EAR CORN with the HUSK on.
They will reduce ALFALFA HAY from the BALE or from the STACKS.

They will reduce ALFALFA HAY and EAR CORN together.

They will reduce ALFALFA HAY and SHELLED CORN together.

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They will reduce ALFALFA HAY and FODDER OF ALL KINDS, with the CORN on.

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They will reduce ALFALFA HAY and two other kinds of CEREALS at the same time, as each machine has three separate feeding places.

They will reduce ANY FORAGE material or CEREAL, together or separately.

They will reduce GREEN CORN from the field.

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They are CUTTERS when desired, GRINDERS when desired and SHREDDERS when desired.

They are COB CRUSHERS when desired.

They will reduce COARSE OR FINE by changing cages.

They will reduce OAT HULLS, RICE HULLS, FLAX SHIVES or any other FOOD MATERIAL.

They produce two grades of goods AT THE SAME TIME, coarse or fine, BY OUR COMBINED SYSTEM OF COLLECTING AND SEPARATING.

They WILL GIVE DOUBLE THE CAPACITY FOR THE POWER EXPENDED AND COST FOR REPAIRS OF ANY KNOWN GRINDER ON EARTH.

We have a corps of competent milling engineers in the field making estimates and taking contracts for the installation of complete alfalfa meal plants, from the stump up.

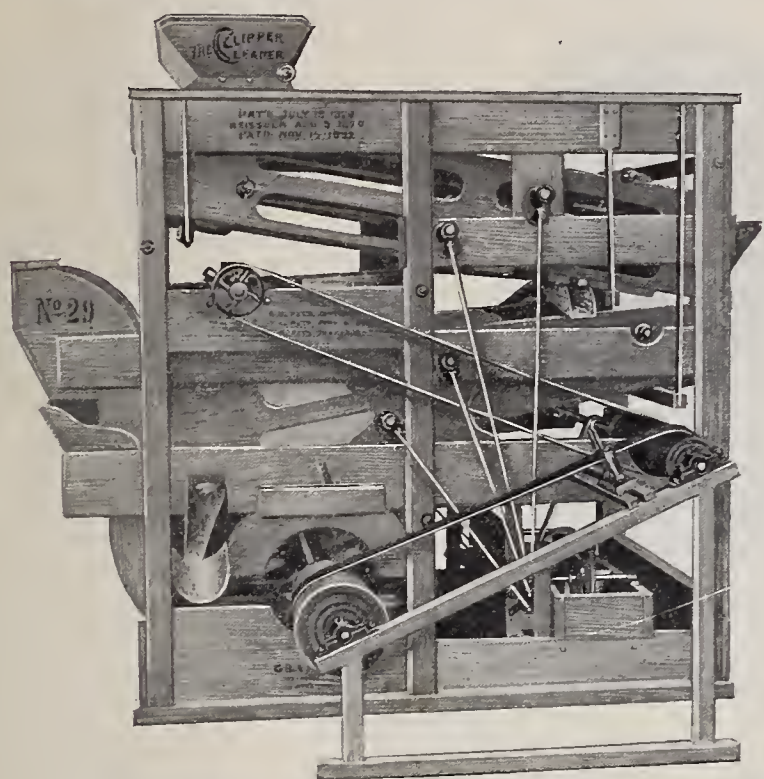
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Automatic Hay, Meal and All Around Feeder

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Our No. 29 "CLIPPER" Cleaner shown in cut is especially adapted to the cleaning of Grain and Flax. The stock passes over two sets of screens 42"x60". Each of the four screens is equipped with our Perfect Traveling Brush Device, which prevents the screen perforations from clogging and insures full screen capacity.

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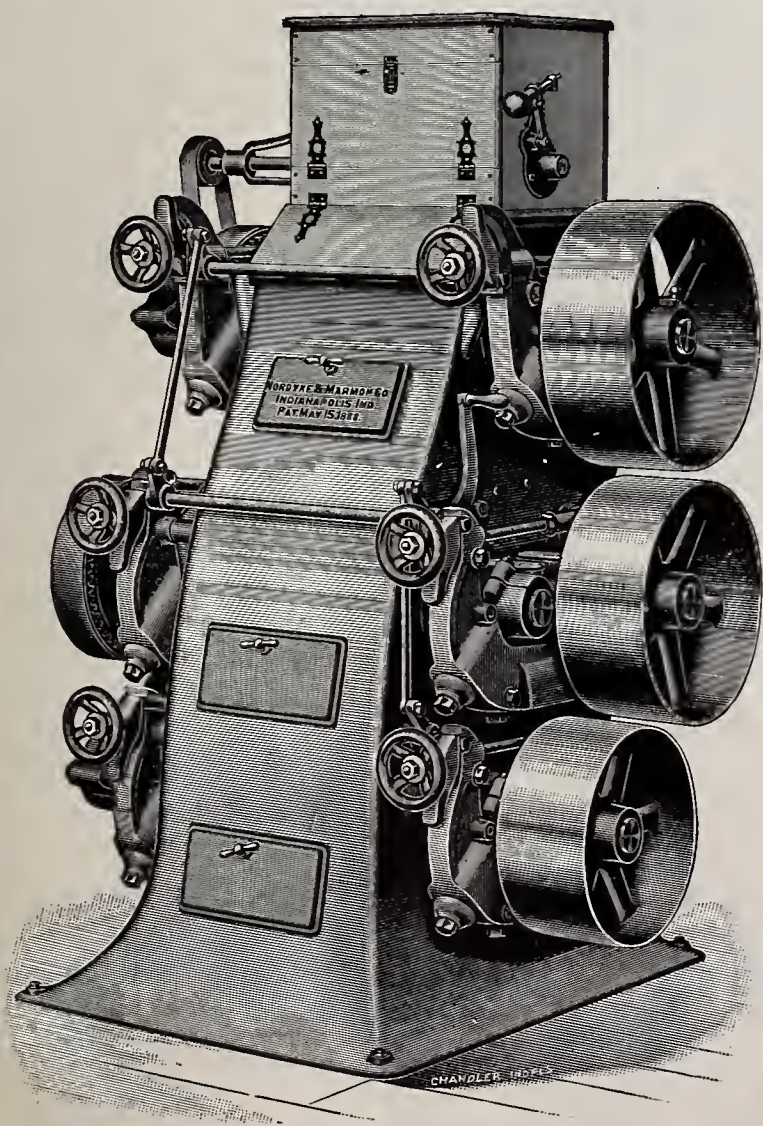
This machine is also equipped with our Special Air Controller, one of the many good mechanical features of our Cleaners. The Air Controller permits of wide variation of the Air Blast and guarantees accurate results.

A Clipper Cleaner will enable you to cut your power bills in two. It will make separations superior to any other Cleaner on the market.

If you are looking for a machine of large capacity, that will do the best work with the least power, give us your order for a No. 29.

We make a complete line of all sizes of machines for all kinds of work and would be pleased to mail catalog and quote prices upon request.

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THREE-PAIR-HIGH SIX-ROLLER MILL

The most substantial, most economical in cost of maintenance. Has great capacity and requires comparatively small power. The only Six-Roller Mill with drive belts properly arranged to place the belt strain on bottom of bearings, where it belongs. It is not the cheapest mill in first cost, but it is by long odds the cheapest in the long run. It is without question the best roller feed mill on the market. Feed grinding pays best when you have a mill which will do perfectly any kind of grinding required and stand up under hard work without breakages and delays.

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We carry a complete stock of Heads and Boots, Elevator Buckets and other Elevator Supplies. All orders are given the very best of attention.

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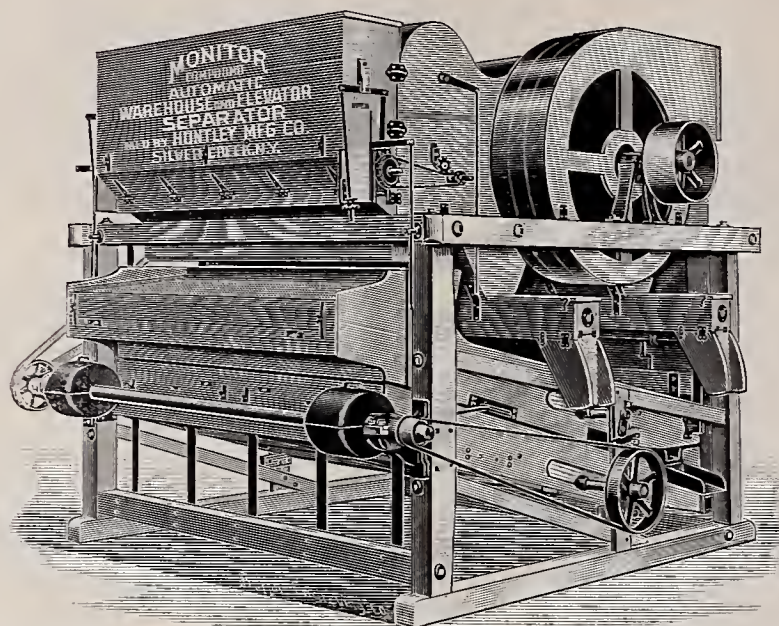
America's Leading Flour Mill Builders

Established 1851

INDIANAPOLIS, IND.

MONITOR

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AUTOMATIC

WAREHOUSE AND ELEVATOR SEPARATOR

Continuous Operation Without Care or Attention

WHAT IT IS

¶ A new type of grain cleaner that delivers by continuous automatic performance thorough and economical cleaning on all kinds of elevator work. Its several patent protected features are clean cut improvements—out and out time and money saving advantages that exist in no other grain cleaner.

HOW IT IS BUILT

¶ This machine is equipped with automatic disc-oiling eccentrics—fully exposed deep reservoir ring oiling bearings—automatic sieve cleaners—automatic force feeder—internal air equalizing regulators—reciprocating compound driven shoes carrying the “Three action” type of screen arrangement. All screen frames built in steel pattern forms and of extra heavy construction, these covered with extra heavy metal. This is undoubtedly the best appointed and most durable piece of modern high class grain cleaning machinery manufactured—guaranteed as such.

WHAT IT WILL DO

¶ Will positively produce a substantial saving on every bushel of grain handled. Close calculation is afforded for both air and screen work. The loss in shrinkage on the air separations of other cleaners avoided, while the screen work of this machine is more thorough and uniform. Cost of operation is reduced—less power, care and attention required. Cost of upkeep practically nothing. Fine, medium or course cleaning on all kinds of grain—capacities 100 to 4,000 bushels per hour.

Huntley Manufacturing Co., Silver Creek, N. Y.

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The American Elevator and Grain Trade

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

VOL. XXVIII.

CHICAGO, ILLINOIS, JANUARY 15, 1910.

No. 7.

MALT HOUSE ELEVATOR.

Daniel D. Weschler and Sons, Incorporated, of Milwaukee, Wis., have recently erected a malting plant and storage elevator, which we illustrate herewith, of more than usual interest, at Thirty-seventh Avenue and Burnham Street, Milwaukee. The elevator was planned and erected by the Macdonald Engineering Co., of Chicago, with special reference to the requirements of a first-class, modern malting plant.

The entire building is of reinforced concrete, the storage of which is divided into cylindrical bins 16 ft. in diameter and 80 ft. high, giving a gross storage of 300,000 bushels. The working house, shown in our illustration as a rectangle, built in front of the storage tanks, contains a separate malt and barley cleaning compartment at an elevation midway of its height. The supply bins for the cleaning machines are rectangular and are located over the cleaning room. The receiving bins for the machines are under the cleaner room floor. The cleaning room is equipped with one American Cyclone Aspirator, manufactured by the American Machinery and Construction Co., of Milwaukee, having a capacity of 1,000 bushels per hour. The machines are arranged in tandem and consist of one large size Invincible Barley Separator, No. 10. This is arranged tandem too, and discharges into a No. 11 Monitor Special Barley Separator. The barley may then be passed to either two standard sets of Invincible Graders, or may be by-passed to the storage bins below, or to elevator legs. The malt cleaning is done on one No. 9 Special Monitor Malt Cleaner, which discharges direct into the clean malt bins. Each of the cleaning machines is directly connected to a large size three-chamber Day Dust Collector located on the roof of a special dust storage compartment, which is built over the track space.

Grain received into this house may be double weighed, first on a 50-foot track scale of 100 tons' capacity, located on the receiving track in the track shed. In unloading, it is discharged by a short elevator leg into a 1,500-bushel hopper scale located on the first floor of the working house. This scale discharges into the basement of the working house to a lofter leg which distributes the grain to any of the storage bins.

For the purpose of independent operation in handling barley and malt, the house may be considered as divided into two sections, one of which is ar-

ranged for the receiving and treatment of the barley and the other in the receiving and treatment of the malt. The barley section is equipped with one receiving leg, delivering grain to a 1,500-bushel hopper scale on the first floor of the working house, with separate lofter leg which distributes the malt to the malt storage bins.

All grain both above and below the storage is handled by means of belt conveyors, the basement being provided with a clear height of about 12 feet. All spouting to and from the bins is made of steel. Special arrangements for sacking and loading sacked malt are provided in a special sacking room

ment of the storage and delivered on to the belts by means of screw conveyors coming from the malt house.

The entire plant is run by electricity, generated in the company's power plant, which consists of independent motor drives connecting to the elevator legs, car pulley, car shovels, belt conveyors and cleaning machines.

The electrical installation was furnished by Allis-Chalmers-Bullock Co. The general machinery equipment was made by the Stephens-Adamson Manufacturing Co., of Aurora, Ill. The spouting and special sheet iron work came from the Weller Manufacturing Co. The belts used in this equipment are the R. F. & C. Brand, Solid-woven Belt made by the Buffalo Weaving and Belting Co., of Buffalo, N. Y.

The entire plant is probably the most complete and convenient arrangement of fireproof malting plant that has yet been erected in the malting business, and has created a large amount of interest among the critical brewing and malting interests of the famous brewing city of Milwaukee.

MILO MAIZE.

Milo maize is distinctly a dry-land crop, for, says H. M. Cottrell of the Colorado Agricultural College, "There are few seasons so dry that, when well cultivated, milo will not yield a fair crop of grain. It will yield 15 bushels an acre of grain under conditions so dry that corn will be a total failure, and in favorable seasons produces more grain than corn with a greater feed value." Taking an average of years, wet and dry, milo will average twice as much grain to the acre as corn in eastern Colorado.

As feed, 100 lbs. of milo are equal for work horses, beef and dairy cattle, hogs and poultry, to 90 lbs. of corn. To horses and beef cattle it should be fed in the head; for dairy it should be ground; to hogs it may be fed either way—in the head, threshed and soaked, or ground and wet to a thick slop; to poultry the whole grain is fed, scattered in litter.

The Dominion government and the C. P. Ry. Co. having both refused to erect grain elevators at Vancouver for the benefit of Alberta wheat growers who think they might like to ship in that direction, the Minister of Public Works of Alberta has asked the provincial government of British Columbia to undertake that work, although his own government of Alberta has itself decided that it "would not be justified in going into the elevator business."



DANIEL D. WESCHLER & SONS, INC., MALT HOUSE ELEVATOR AT MILWAUKEE.
Macdonald Engineering Company, Engineers and Contractors.

located immediately above the track space. The sack loading chutes are located on this floor on the outside of the building and deliver the sacks through an opening in the wall of the vestibule at each end of the working house at the level of the car floor. Arrangements are also provided for sacking and loading of the byproducts of the cleaning machines, either in the shape of tailings, malt sprouts or seeds. This material may be loaded either in bulk or in sacks, for which special spout provisions are made. There is one bifurcated car loading spout erected so as to fill a car in position on the track scale. Both of the lofter legs deliver to this spout. Connection is made with the malting plant by means of a transfer spout for the delivery of the barley, and the malt is received into the base-

ANTI-FUTURES BILLS.

Washington advices say that Congressman Scott of Kansas, whom Speaker Cannon two years ago lifted out of semi-obscurity and made chairman of the committee on agriculture of the House, will this session "push" his bill to forbid "gambling in futures"; and also that President Taft "is preparing to give his endorsement and support" to legislation of the same kind, in so far as it relates to "gambling in futures in food products." Indeed, it has been said that a message to that effect may be expected. Walter Wellman, who has abandoned the pole since Peary's visit thereto, says, however, that this is not the fact. It was stated with much particularity about Christmas that the President had invited to a conference on the subject such men as Secretary Knox, Attorney-General Wickersham and Representatives Scott of Kansas, Burleson of Texas and Lovering of Massachusetts, all of whom are known to have positive opinions in favor of prohibiting all trading in futures of grain, cotton, stocks, bonds, or anything else; but Mr. Wellman's despatches say that no such "conference" was held at all, except that the Representatives named did call on Mr. Taft on their own initiative to let him in on the ground floor as to their views, in which, it is declared, he expressed but little interest. So probably the "special message" may not come; but the trio's bills, consolidated as one will undoubtedly appear in the House.

The original Scott bill placed gambling transaction in futures on the fraud list and empowered the Postmaster-General to issue orders excluding persons, firms or corporations engaged in the practice from the use of the United States mails. It has been consolidated with the Burleson bill, which goes further and prohibits the use of telegraph and telephone lines for such purposes. Commissioner Knox goes after the "gamblers" in stocks and cotton. He wants a bill to countenance "legitimate" trading but to penalize "gambling"—"hit if it's a deer and miss if it's a calf." Lovering's specialty was taxing the operations of brokers in commodities as a source of revenue for the Government and also with a view to curbing their operations; and as the Government has become badly addicted to the spending habit, this last proposition, it was thought, would appeal to the administration; but when this phase of the matter was called to the President's attention during the special session of Congress, Mr. Taft intimated a preference for the corporation tax as a means of supplementing the revenue derived from the tariff, and Mr. Lovering has since been converted to the Scott bill.

TO IMPROVE THE CROP REPORT.

Victor H. Olmsted, chief of the Bureau of Statistics, in his annual report for 1909, among other things, recommends "increasing the appropriation to enable the Bureau to employ more especial field agents," whose contributions of information, gained by travel and personal investigation, he says, "has strengthened the monthly estimates;" but, he adds, "the number of this class of employees is too small, considering the wide agricultural area of the United States, and each of them is, consequently, required to cover larger sections of territory than is consistent with the best obtainable results." He hopes that an increase of the appropriation from year to year may "make possible a gradual enlargement of this service until eventually a field agent may be assigned to each of the larger and more important agricultural states, to which he shall devote his entire time and attention."

He further recommends that the "salaried employees of the Bureau whose duties are performed away from Washington should be inspected at comparatively frequent intervals, and that from time to time such personal supervision and instructions should be given them as will result in securing the greatest possible efficiency on their part to the end that their reports regarding agricultural matters may be dependable. It has been found in practice that the best results along these lines can not be secured alone by correspondence, and that the detailed written instructions with which all field agents and state agents are supplied are sometimes

misunderstood or not followed by them. No plan of dealing with employees at a distance from headquarters can adequately take the place of personal inspection, supervision, and instruction. This work can be accomplished only by one who is thoroughly familiar with all the requirements pertaining to the collection of information regarding crop acreages, conditions and yields and with a comprehensive knowledge of agricultural statistical methods. No official not conversant with the entire field covered by the work of the Bureau can perform this service properly."

COMMISSIONER LINCOLN.

The president of the National Industrial Traffic League, who is also (and primarily) Traffic Commissioner of the St. Louis Merchants' Exchange, is one of the most distinguished champions of the rights of shippers in this country. James Claiborne Lincoln is not an agitator; unlike the professional reformer, he is not engaged in the questionable business of exploiting sophistries; unlike the politician in the legislature, he has neither "wheels in his hand" nor an ax to grind. He is simply a promoter of harmonious relations between shippers and carriers, primarily of course on lines that will conduce to more equitable terms to the shipper but not on a



J. C. LINCOLN.

basis of unfairness to the carriers. Although the carriers have not been willing so far to concede, where they can avoid it, common law rights (and, we may add, sometimes common fairness) to shippers, it may well be questioned whether the carriers themselves would not be benefited immediately and permanently by coming to fair terms at once, and recognize now that the semi-public character of their business is such that sooner or later the public control of transportation in the interest of absolute equality of service to all shippers is such that in the end such control will obtain in the letter and spirit. The day of privilege is passing; its death knell was sounded in the French Resolution; the war against it since has simply changed its form and direction; but privilege that means unfairness to the many is doomed; and in transportation privilege in these days has reached its most objectionable form.

Now, of course, Mr. Lincoln is not a revolutionist—his daring freedom from a surplussage of hirsute appendage would at once separate him from that type of man; he is simply a sane, intelligent and earnest promoter of equality of opportunity in the use of the transportation system of the Nation by cities, sections, and individual shippers, and the clear demarkation of shippers' rights in their relations to the carriers.

Mr. Lincoln has been well trained for this work. Born on April 5, 1862, at Liberty, Clay County, Mo., he entered the railway service in 1876, since which date he has been consecutively (from September, 1876, to August 31, 1888) clerk in the car service, in the superintendent's and in the general freight and passenger departments of the St. Joseph &

Grand Island Ry. (formerly the St. Joseph & Denver City Ry.); from September 1, 1888, to November 1, 1889, he was commercial agent of the Missouri Pacific Ry.; from November 1, 1889, to January 1, 1890, he was clerk in the freight traffic department of the same road; from January 1, 1890, to March 15, 1897, he was assistant general freight agent; from March 15, 1897, to December 18, 1899, he was first assistant general freight agent; from December 18, 1899, to November 15, 1905, he was general freight agent of the same system, at St. Louis, Mo., and from November 15, 1905, to May 1, 1906, assistant freight traffic manager of the same system, in charge of freight traffic in Missouri River territory and west, with headquarters at Kansas City, Mo. From May 1, 1906, to date, he has been commissioner of the Traffic Bureau of the Merchants' Exchange of St. Louis, Mo.

Incidental to his work as Commissioner at St. Louis, he became by natural selection of his associates in that body chairman of the National Industrial Traffic League, a national organization with a membership of nearly 200, said memberships being units representing individual firms and also more than 75 national, state and district industrial and commercial organizations; so that the League represents in fact a total of over 60,000 of the largest shippers of the Nation.

This League was organized in August, 1907; and as Mr. Lincoln has been its only president, he is now serving his third term in that responsible and, in his case, most useful capacity.

KILN DRYING OF CORN.

On December 15, the Illinois Railroad and Warehouse Commission, incidental to the hearing of a complaint against the increase of the charge for out-inspection, listened to some remarks on kiln-dried corn, which is again, this season, an important factor in the corn market. The subject was introduced by Chas. H. Gibson, who thought that a notation should be made on inspection certificates to the effect that the corn was or was not kiln-dried. He said that frequently brokers have orders to buy such corn at a premium and at other times their orders are not to accept such corn under any circumstances—distillers particularly sending in the latter kind of buying orders. The kind of corn, therefore, in his opinion, should be shown by the certificates of inspection. (Both the naturally dried and the kiln-dried qualities, if otherwise conforming to the rule, are deliverable on contracts.)

Geo. W. Patten reminded the Commissioners (Eckhart and Willoughby) that this question had been previously thrashed out *ad lib.*, and he could see no good reason for reopening it now.

Inspector Cowen, when asked for an opinion, said it is not expected that No. 2 corn should be dried below 16 per cent of moisture, and it is not desirable. The private elevators are making No. 2 corn by drying it, but the Board of Trade grain committee does not allow all the kiln-dried corn to go into public elevator storage as No. 2, even if it contains only 16 per cent of moisture.

J. C. F. Merrill, chairman of the Board of Trade grain committee, explained the position of that body, which is substantially this, that the committee insists that the grain going into public store shall be uniformly dry. The committee will not accept a mixture of soft (wet) and dry corn that is mixed to average 16 per cent of moisture. A No. 3 corn with say 17 to 18 per cent may be dried to 16 and mixed with corn naturally dry to the same degree and be permitted to go into store, but a mixture of corn carrying larger percentage of moisture (say 18) will not be allowed to be used with artificially or naturally dried corn with 14 per cent of water so as to average about 16 per cent, as it is not expected, and it is not the experience of the trade, that such grain will carry through the season and be a fit condition to be delivered on contracts in the following May or June.

Mr. Patten said corn carrying 20 to 22 per cent of moisture should never be dried to make No. 2. Such corn is "bloated," so to say; the "skin" is stretched thin, and when the moisture is extracted

it shrinks and collapses and the grain after even a little handling only becomes meal or otherwise "goes to the bad." All grades can be improved by moderate drying, but No. 2 cannot be made out of No. 4 corn—only the best No. 3 (with about 17 per cent of moisture) can be dried to No. 2 and make a corn that will carry in store and come out all right in the spring or early summer.

It was agreed by most of the experts that the rule permitting 16 per cent of moisture in No. 2 at Chicago is too liberal by 1 to 1½ per cent; but Mr. Merrill explained that it was put at that figure in the interest of the "Uniform Grades" of the Grain Dealers' National Association. For nearly all markets other than Chicago 16 per cent is a safe figure, perhaps, but in Chicago, which is the only market that carries corn as a storage proposition, 16 per cent is rather too much moisture to be absolutely safe; hence the extra precautions the Board of Trade grain committee is compelled to take to see that only such corn goes into store as No. 2 as is uniformly dry (at 16 per cent) when it goes into store. As it is 16 per cent in this market in No. 2 corn is as yet only an experiment, and it is by no means certain that it will prove an entirely satisfactory one.

It was the consensus of opinion that Mr. Gibson's request is impracticable; it would amount in practice to the making of an entirely new and superfluous grade of corn.

The matter was thoroughly gone over, and was taken under advisement by the Commission.

THE RICE INDUSTRY.

The latest statistics of the American rice production are those compiled by the crop reporting bureau of the Texas-Louisiana Rice Farmers' Association, which were published on December 24. By this authority the crop for Louisiana is estimated at 3,007,896 bags; Texas, 2,390,217; Arkansas, 325,000; total, 5,723,113, equal to 22,892,452 bushels. The amount of rough and clean rice on hand on November 20, as shown by statements of mills, warehouses and farmers, was as follows: Louisiana, 1,795,112; Texas, 1,390,217; Arkansas, 217,000 bags.

The crop figures are very near to those of the United States Department of Agriculture, given out on Dec. 15. The Government figures included the Atlantic Coast states and showed the crop to be about 6,000,000 sacks, or 24,000,000 bushels.

The production has increased many fold in the past fifteen years, or since Louisiana and Texas became producers. During the past five years Arkansas has become an important factor in the market, with a promise of being still further heard from with larger and larger production year after year. Last year for the first time Mississippi, in the immensely fertile Yazoo Valley, produced rice; and it is believed by professional land men, especially those of the Illinois Central land office, that this crop will hereafter become an important one in that state. Hon. Chas. Scott, Scott's Station, was the pioneer, and his success has induced another large land owner at Greenville to plant 100 acres next spring as an experiment. At Yazoo City also, the Rialto Rice Company has been incorporated with \$10,000 capital stock, to make the same experiment. This company will have the benefit of supervision of its experiment by a Government expert. In Concordia Parish, La., also lying along the Mississippi opposite and below Natchez, the planters near Lake St. John are going into rice, which will displace sugar and cotton for the time being.

The American rice farmers' problem at this time, however, is the sale of the crop. The production has gone ahead faster in proportion than the consumption has increased. It has not overtaken production, of course, for there is still considerable rice imported; but the farmers think they must do something to hold up prices.

Recently Mr. Henri L. Gueydam, representing the Rice Association of America, was sent to Mexico to consult with the Minister of the Interior of that country with a view to getting some tariff concessions from the Republic, but he stated that his mission had been fruitless, owing to the fact that Mex-

ico raises all the rice it consumes. Mr. Gueydam said he was informed that the average Mexican as a rule does not eat much rice but sticks to corn, and that rice in that country is not considered a staple food, as is the case in this country.

LOUISIANA DESERTING COTTON FOR CORN.

Louisiana, as we have seen this crop year, has taken seriously to corn. Perhaps, in view of the high price of cotton, this might seem like a rash assertion, but experience with boll weevil, which destroyed the cotton crops of 1907 and 1908, has demonstrated that "rotation" alone can save the cotton lands; and that corn is the greatest rescue crop, the 1909 crop of which, grown on the ruins of the cotton of 1907 and 1908, was large enough to put Louisiana in a single year in the list of "surplus corn states" (some of her corn having already gone abroad) and money in the purses of her planters.

Among the promoters of this corn movement in the Pelican State, none is more conspicuous than W. E. Glassell of Shreveport, who in November of last year was named as president of the then organized Louisiana Corn Growers' Association, an honor which the Shreveport Times then said came "as an



W. E. GLASSELL.

acknowledgement of the great work he has done for the corn growing industry in Louisiana." Mr. Glassell had previously become distinguished as president of the North Louisiana Cotton Planters' Association; and when it was found necessary to turn from cotton to corn, he led the way; and having produced a crop was the first to submit samples of the grain to the New Orleans laboratory for analysis to ascertain its quality for export, following up this action by securing a revision of freight rates to permit the growers to market their corn in New Orleans for export and in Texas for local consumption. And next year the Association, of which Prof. W. R. Dodson of the state experimental farms is secretary, will have a prize contest by exhibitors of corn at the state fair.

"Mr. Glassell," writes his friend John B. Railsback, who has kindly furnished us with information concerning him, "was born in Culpepper County, Virginia. His father, John Glassell, was a farmer, as were also his grandfather and his great-grandfather, the latter coming to America from Scotland in 1756 and settling in Madison County, Va., on the upper Robinson River. He was locally renowned as one of the few farmers who had corn for sale in the year 1816, known as the 'Summerless Year.'"

"While W. E. Glassell was still very young his father moved with his family to Louisiana, and settled on a farm near Mansfield, where the son was reared. The limited school facilities and the extreme hard times experienced by the South just after the close of the Civil War, afforded but poor

educational advantages for a promising youth; but these, such as they were, were utilized and, supplemented by the more valuable drill received in his father's study, fitted him for a position of prominence, which he subsequently achieved.

"In 1879 Mr. Glassell accepted a position as manager of a plantation store on a farm owned by Messrs. J. M. and C. J. Foster. The farm had in cultivation about 10,000 acres under cotton and corn and was making from 3,000 to 4,000 bales of cotton per year, with plenty of corn for use on the farm. After four years of service on this farm, in which he was advanced from manager of the store to general manager of the farm, he went into partnership with his employers and opened a wholesale grocery and cotton factor's office in Shreveport, La.; and has been the active manager of the firm since its organization, twenty-one years ago.

"His increasing prosperity developed within his heart no arrogance, but instead a deep seated sympathy for those people, especially the young, who as he himself was are denied opportunities; and his hobby is education for the growing generation, and a fair deal for the producer of things.

"Desiring to secure a better price for produce, he accepted the presidency of the North Louisiana Cotton Growers' Association in 1903, and was elected for the second term on his record. Mr. Glassell was also president of the Board of Trade, the largest commercial organization in Shreveport, for two terms, and is now a member of the Conservation Committee on National Resources and a director on the Public School Board.

"In 1906 when the cotton weevil invaded northern Louisiana, the farmers prepared to fight and did fight valiantly, losing nevertheless the crops of 1907 and 1908. Then in 1909 in despair they turned to corn; and already from a region which from its very first settlement had imported corn every year there has been exported through Shreveport over 1,200 cars of corn, the quality of which is so high that it brings calls from neighboring regions for planting seed.

"The remarkable success of the 1909 crop resulted in the organization of a Corn Growers' Association, Mr. Glassell serving as its president. The object of this association is to educate the farmers in the best methods of corn growing, to secure markets and fair treatment by transportation companies, etc. The great interest manifested by the farmers cannot but result in the maintenance of the remarkable quality of north Louisiana corn and to greatly increase its yield.

"Along this line, Mr. Glassell's latest effort is in his capacity as a member of the local school board, where he has been successful in setting in motion an effort to organize Boys' Corn Clubs, and to introduce agricultural training and gardening in the primary schools. Mr. Glassell grew up on a farm, and his business dealings have always been with farmers. Their manifold interests he has in every case taken to heart, and has joined and encouraged every movement intended to promote the farmers' welfare in any way; and the most encouraging sign of the times is that this spirit is abroad in this our beloved America, and men, instead of peevishly asking, 'Am I my brother's keeper?' are only enquiring how they may serve their brother. For most men Mr. Glassell has answered this in his life, and the answer is, Serve not your brother only by giving alms, or by benevolence, or by teaching, or by preaching, but in your every-day business, by doing everything in your power to aid those with whom you come continually in touch."

No less than 30 French sailing vessels have left, or will leave, Portland, Ore., for Europe, loaded with wheat, crop of 1909. These ships are now earning a sailing (mileage) bounty paid by France; but as the bounty law expires during 1910, and it is claimed by those supposed to be in a position to know, that it will not be renewed, the number of such vessels in the grain trade is expected hereafter to be small. The French shipowners appear to be entertaining this view, and are disposing of their vessels as rapidly as a market can be found for them.

THE OUT-INSPECTION FEE.

The Illinois Railroad and Warehouse Commission, Commissioners Eckhart and Willoughby being present, on December 15, gave a hearing to Chicago shippers and elevator men on the matter of the fee for out-inspection of grain, which has been advanced to 50 cents per 1,000 bushels. There were present about twenty-five or thirty of the leading men in the trade.

The subject was introduced to the Commissioners by J. C. F. Merrill, chairman of the grain committee of the Board of Trade, who said the trade felt the new charge of 50 cents per 1,000 bushels was inequitable while the fee for in-inspection was but 50 cents per car, no matter what might be the quantity of grain the car might hold.

Mr. Stream of J. C. Shafer & Co. said he thought the rate in and out should be uniform; it is unfair to tax the elevator man from 50 cents to \$1.50 per car for the same service that is rendered to the country shipper for 50 cents.

Mr. Mason (A. O.) submitted that inspection at the elevator is an easier proposition than inspection at the car, the grain being more evenly loaded.

wheat, corn and barley, which average but little more than 1,000 bushels per car, and restore the old rate of 50 cents per car for inspecting oats.

Chairman Eckhart asked if that would be satisfactory; and though nothing was affirmatively said, the impression was given that it would.

Mr. Patten added that the fee would hit the private elevator men more than others in the market; and Mr. Rosenbaum pointed out that as a new grading is provided for purified oats, 90 cents per car is added to the expense of handling that kind of oats through this market.

The subject was then taken under advisement by the Commission.

THE HOUSE OF GRIMES.

That prince among grain dealers, who if need were could hold up the hands of the grain trade among princes, H. S. Grimes of Portsmouth, O., in December observed the thirty-first anniversary of his connection with the grain trade. Like that other kind of an "elevator man," he has had his ups and downs, but he has been up a good many years now and gets younger at it year by year; so there is



H. S. GRIMES'S GRAIN ELEVATOR AT LUCASVILLE, OHIO.

Mr. Rosenbaum (E. F.) said the raise falls upon the grain upon which the least profit is made by the handler.

Mr. Patten (Geo. W.) said the effect of the increase would be to drive grain away from Chicago and make it easier for handlers at junction points, where there is no inspection, to divert grain from this market. The expense now falling on a car of grain going through Chicago as a transfer point is \$2.15.

Inspector Cowan then gave the average weights of cars of grain at this market, corn and wheat being between 1,100 and 1,200 and oats something over 1,700 lbs. The reason for the increase made by the Commission was the fact that the out-inspection is carried on at a loss to the department; at many elevators the service demanded costs far more than is realized. The inspectors are doubled up as far as possible—are on track in the morning and in the elevators in the afternoon; nevertheless the out service costs more than is received from it; and the sole aim of the department is to make the service self-sustaining. The actual advance, except upon oats, is slight.

Mr. Marcy (G. E.) was certain the new fee would drive grain from this market to other and less expensive routes.

Mr. Merrill suggested that the solution of the problem might be to let the new rate stand as against

no use thinking of his retiring for years yet, thanks be.

His business, as every one in the grain trade knows, is track buying from his headquarters at Portsmouth; but he has an interest in four elevators outside of Portsmouth, one of which is the house shown in the picture.

This house is located at Lucasville, O., on the N. & W. R. R., some miles north of Portsmouth. It is a 3-bin house of 10,000 bushels' capacity, iron-clad inside and out; and like its owner is "modern in every respect" and in the best sense.

The annual meeting of the Mill Owners' Mutual Fire Insurance Company will be held at its office in the Manhattan Building, Des Moines, Iowa, on Wednesday, January 19, 1910, at 2 o'clock p. m., for the election of directors whose terms expire, and for the transaction of such other business as may properly be brought before said meeting.

The grain dealers of Nashville have passed through a year of great prosperity and the volume of their business for the twelve months of 1909 amounted to more than \$26,000,000, which was a great excess over 1908. The dealers handled by rail 19,222 cars of grain and 3,725 cars of hay. In addition there was about 1,500 cars of grain handled by the river.

[For the "American Elevator and Grain Trade."]

MERCHANTS' EXCHANGE OF ST. LOUIS.

SUMMARY OF EXCHANGE DEPARTMENT REPORTS FOR THE YEAR 1909.

BY L. C. BREED.

The department reports of the St. Louis Merchants' Exchange will be found of interest not only to the members of this body, but also to all parties engaged in the grain trade, who, either regularly or transiently, deal with that market as shippers or buyers. Members of other exchanges can, it is very likely, find something in the line of suggestion by noting the methods employed by this organization, which, by virtue of the fact that it has had nearly fifty years of experience, is able to offer an example for more recently established boards of trade to follow; and this statement is the more fully warranted, since, notwithstanding it is one of the oldest bodies of this character in the United States, the Exchange is amply provided with able, up-to-date facilities which this long experience has suggested or shown to be desirable, and its membership is thoroughly imbued with modern spirit and the ideas of the times.

ST. LOUIS TRAFFIC BUREAU.

In the year 1908 business activity reached its lowest ebb; and with the close of that year the movement for a general rate advance, to enable carriers to recoup by reason of the enormous shrinkage in tonnage, was still a live issue. With the beginning of the year 1909, through the resourcefulness of our country and the wealth accumulated through the value of our agricultural production, business rapidly assumed normal conditions, so that today the tonnage that is being transported by carriers is as great as, if not in excess of, the high mark of 1907.

It is proper, therefore, to feel somewhat sanguine that the rate bases as at present existent will represent the maximum, unless some unforeseen calamity should overtake us. In consequence of these conditions, there is less friction between shippers and carriers and the Bureau does not meet with the opposition previously existing in securing those concessions or equalizations which by right inure to this market.

The Traffic Bureau maintains a most comprehensive tariff file, consisting of approximately 4,500 live issues. The average daily receipts of supplements to current tariffs and superseding issues will approximate 50 publications, which are carefully reviewed before posting for the purpose of determining if any discriminations are thereby created against St. Louis, which, if discovered, are made the basis of negotiations with the carrier for correction.

While members are requested, so far as practicable, to ascertain rates from carriers, securing quotations in writing, and in case of doubt to confer with the Traffic Bureau for confirmation of the rate, the integrity of the tariff files is made the occasion for quotations of rates, rules and regulations. The making of erroneous quotations and the giving of incorrect advice as to rules and regulations on the part of carriers is of more or less frequent occurrence.

The Bureau is often called upon by both shipper and carrier to verify and furnish correct information. In frequent instances, the erroneous quotation on part of carrier, if not corrected, would have caused shipper a pecuniary loss. Such cases, when taken up in advance with the Bureau, have been corrected and loss avoided.

General circulars, circular letters, rate circulars and bulletin notices are issued from time to time for the dissemination of information to the members, and a bulletin board is provided on the floor of the Merchants' Exchange that prompt and convenient notice may be given when necessary. Of general circulars, there were issued nine; of circular letters there have been issued fifty-four; of rate circulars, forty-two, and of bulletin notices thirty-one. Through these several mediums the membership of the Exchange is informed not only of matters in contemplation but of those which have been consummated.

While the Traffic Bureau does not and can not

undertake to handle claims for members, the friendly offices of the Commissioner (J. C. Lincoln) is often sought in securing settlement of disputed claims and early adjustment where claims have been delayed for reasons for which shipper was not responsible. Through the facilities at the command of the Commissioner, the early settlement of delayed claims has been secured and data obtained, based upon which disputed claims were placed in final shape for settlement.

The National Industrial Traffic League is at present composed of over seventy-five leading commercial, national and state organizations throughout the United States, in addition to traffic representatives of the largest industrial corporations in the country, representing in its membership from 70,000 to 80,000 shippers. The object of this organization is to secure harmonious relations between shippers and carriers on broad questions involving the shipping community as a whole; co-operation with the Interstate Commerce Commission in the matter of administrative rulings and regulations affecting shippers, and the securing of reasonable and just legislation in the interest of shippers where required. The Commissioner of the St. Louis Bureau is also the president of this national organization, having been complimented with a second reelection at the annual meeting of November, 1909.

Through the instrumentality of the League needed amendments to the interstate commerce act have been advocated and will be recommended to Congress by special message from the President, the amendments sought relating to "giving to the Interstate Commerce Commission the power to suspend proposed advances in rates"; "giving to shipper the right to route freight"; "written quotations of legal rates and responsibilities therefor."

ST. LOUIS DEPARTMENT OF WEIGHTS.

The Department of Weights, under the direction of Mr. John Dower, during the present year has made no radical departure from its previous course, but has adhered closely to its policy of increasing the practical utility of its work, where by patient labor and close attention to detail, it has been possible to increase the high degree of efficiency that has heretofore been maintained. By the most careful selection of its employes with a view to their fitness for the position they are to fill, the personnel of the Department has been improved, and practically every man is an expert in the particular work that is assigned to him.

At the elevators are still maintained two men, one to check the weights at the scale, and the other to oversee the actual loading and unloading of cars, obtain seal records, look after the physical condition of cars, see that the entire content of inbound cars goes to the scale, and that all grain weighed for outbound car goes into that particular car. Licensed private watchmen are still maintained to exercise a general supervision of the unloading of hay and grain at team tracks, to protect cars in the railroad yards, keep a record of their seals and condition on arrival, and co-operate with the railroad yard clerk to see that all loads hauled are credited to the proper car.

The excellent system of car inspection inaugurated last year, whereby a record is obtained of the seals and condition of all cars immediately upon their arrival at the hold-tracks in the outskirts of the city, is still in vogue to all parties interested in consignments of grain destined for this market. Requests are constantly being received from shippers and carriers for copies of these reports to be used in the adjustment of claims for loss in transit. Any doubt that may have existed as to the wisdom of adopting this system of car inspection at the time of its inception has long since been dispelled, and the shippers to this market now regard this as one of the essential parts of supervision.

The scope of the scale testing and inspection department has been greatly enlarged, and facilities for performing this most important part of the work have been increased by the purchase of 10,000 pounds additional U. S. Standard test weights, which enables loading wagon scales to their capacity,

with an absolute standard that will disclose the slightest variation. The Department's experience has been that upon the condition and handling of team track scales more than anything else, depends the reputation of the market, so far as weights are concerned. Grain at team tracks is hauled in from eight to ten loads per car and a very slight variation on each load, together with loss in handling, will cause a shortage that is excessive when compared with the loss at the elevators in this and other markets, hence, in order to obtain the best possible results, frequent testing of wagon scales is employed to keep them in accurate weighing condition; and with the facilities now possessed the Department is better equipped to do the work than ever before.

The Department has also constructed a 3,000-pound hopper, equipped with a steel yard-beam for use in the elevators. Exactly 3,000 pounds is weighed on the steel-yard, and reweighed on the hopper scale. This process is repeated until the hopper scale is loaded to its capacity, and the variation, if any on each draught and on the entire load is noted. Frequently, the weights obtained on a scale indicate that it is not quite correct, but it is not possible to use enough test weights to demonstrate sufficient variation to justify condemning the scale. In these cases the steel-yard has been used with most gratifying results, the test confirming the contention that the scale is incorrect, and upon its being overhauled and repaired has caused no further complaint.

During the latter part of last year, an extended investigation was made to ascertain the cause of complaints received from several southern points, that cars weighed out of St. Louis elevators under the supervision of this Department were falling short at destination, and it was found that defective cars were largely responsible for those losses in weight. Downstairs men at the various elevators were given strict instructions to closely scrutinize all cars offered for loading with grain; to make an inspection of the car before and after loading, and to reject those that were defective. This was followed, wherever possible, by another inspection of the car in the outbound yards after it went through the terminals, and where leakage was detected, or any material defect is the car observed, the owner of the grain was notified. Since these extra precautions have been observed, complaints of this character have been less frequently received.

During the year the relations of the Department with all parties interested in its work have been most harmonious. Shippers and receivers have in many ways expressed their confidence in the Department, and their appreciation of its work, while the elevators have shown every reasonable consideration to the Department and its men.

Statement of the number of cars examined during the year found to be in defective condition or not properly sealed:

	At point of unloading.	Hold track.
Leaking grain door.....	3,742	1,822
Leaking over grain door.....	372	131
Leaking boxes	9,934	8,216
Leaking end window.....	450	663
Cars not sealed	3,967	2,561
End window not sealed	2,639	1,093
End window open.....	520	377

ST. LOUIS PUBLICITY BUREAU.

The Publicity Bureau was organized and began operations on July 15th, 1909. The first undertaking was to determine where the members of this Exchange were doing business and where publicity for the St. Louis market was most desirable. To this end, a request was made of each firm to furnish a list of its correspondents, which was quite generally done. These names and addresses were classified, and the result tacked upon a series of maps, which show the extent of the St. Louis territory at a glance, together with the number of correspondents at each point. In addition to these names, the addresses of all grain men are being compiled from mercantile agencies, state associations and correspondence, in order to make a complete directory in every state.

The next step was to ascertain the willingness of

the various newspapers in other cities to print St. Louis market quotations, and to determine how many of them could be reached by the existing news service. Every daily paper in the territory was examined and a record tacked upon the maps showing just what newspaper service is available in every town, and whether or not the St. Louis market is printed.

Naturally, the press association papers were first examined, and outside of a few of the larger cities it was difficult to find St. Louis markets included in their commercial pages. In towns where the report was lacking every grain man and miller was asked to use his influence to persuade its local editor to print the St. Louis markets, and this plan succeeded in practically every city on the list where it was possible to get a telegraphic report. Contrary to the general belief, all points in this territory can not be reached through the press associations, and therefore there are many circuits which at present must be supplied in some other manner until arrangements can be perfected to send the news in a regular daily press report.

The next plan to be considered, was to induce the telegraph companies to make satisfactory rate on a message covering the complete close of the market to points which can not be reached at present by any press service. A favorable rate was made to almost every state in this territory, and the Bureau is endeavoring to induce the companies to include the several states which lie in another telegraphic division. Under this plan, a number of members are now supplying the market information to various papers at their own expense.

By these and other means, there are now about two hundred and eighty papers publishing the St. Louis grain market regularly. These papers are located in nearly every state in the Union, Illinois, Iowa, Missouri, Kansas, Nebraska, Kentucky, Tennessee and Indiana leading the list. In order that each grain man, wherever located, may obtain our quotations at the earliest possible moment, the Bureau is furnishing their addresses to the nearest newspapers. An invitation is issued to call up the paper by telephone at any time when St. Louis market news is desired. All those who are not taking the paper are solicited to become subscribers. South-eastern Missouri is covered four times a day by long distance telephone, the news being radiated from St. Louis of direct connection to that entire section of the state.

A number of circulars have been sent out from this Bureau, among which may be mentioned two thousand to Texas, Oklahoma and Mexican grain dealers. Responses are still being received, and up to date about fifty inquirers have been placed in communication with interested members. Many of the members have obtained the services of this Bureau in preparing circulars and other matters and are now sending out thousands of advertisements at their own expense.

A canvass in Missouri and Illinois has been made to ascertain to what extent grain men derive market news from the St. Louis press. The result has been very satisfactory, showing that about 95 per cent of them are thus supplied. The grain, elevator and flour trade papers throughout the country have expressed a great interest, and their columns are freely offered for the dissemination of St. Louis news. An effort is now being made to inaugurate a ticker service to supply St. Louis quotations to the local brokerage offices. Several brokers have signified their willingness to subscribe.

DATA REGARDING THE MARKET FOR FUTURES IN GRAIN AT ST. LOUIS.

Although it is not a matter of exact record, there is no doubt that the future market in St. Louis is rapidly growing. A comparison in the Market Reporter of dates ten years ago and at the present time, shows conclusively that there has been a steady increase in the volume of trade. For instance, on January 5, 1900, the trades in the pit amounted to 890,000 bushels; on the same date in 1910, trades amounted to 2,100,000 bushels. The next day, January 6, in 1900 was 620,000 bushels; in 1909, 850,000; 1910, 3,030,000 bushels. Taking four dates,

September 1, October 1, November 1 and December 1, the statistics show for the four days in

1903	5,915,000
1904	5,410,000
1905	5,705,000
1906	5,240,000
1907	6,590,000
1908	4,830,000
1909	6,760,000

It is true that business on some dates in earlier years was larger than on the corresponding date in later years, but the St. Louis market is undoubtedly becoming more of a factor in the grain trade of the United States every day.

It is apparent that the practice of "spreading" is becoming more popular every day, and that the St. Louis market is very attractive to students of daily conditions, offering frequent opportunities to make a profit in these transactions in legitimate speculation.

INSPECTION MATTERS.

Secretary E. J. Smiley has begun a campaign in Kansas for in-door inspection of grain, as practiced at Chicago, Minneapolis and Duluth, as more likely than the present system to give best results. Mr. Smiley recently gave to the press a letter on the subject by Inspector Cowen of Illinois, apropos which Inspector White of Kansas said in reply: "The views of Mr. Cowen are approved by me. I think if the Kansas City Exchange was located so that we could inspect in a room and get the samples there I would put it in force at once, but I do not feel that I would have the right to establish an office or working room in the state of Missouri, and we could not gather the samples in Kansas City, Kan., and get them to the Exchange building in time for market. Whenever we can see our way clearly to do that I would be glad to put it into force." It is Mr. Smiley's belief that the new system will be put into practice eventually.

Philadelphia papers report that several complaints have reached that market from Liverpool and Manchester that grain bought on Philadelphia inspection certificates has not been up to grade. When the matter was brought to the attention of the Commercial Exchange it became a question whether it would be placed in the hands of the grain committee or referred to a special committee. President S. F. Scattergood decided upon the latter course; and a special committee was appointed, of which William J. McAleer is chairman, to look into the matter.

Senator McCumber's and Representative Gronna's bills for National inspection of grain will be "on the list" of bills before the present Congress.

In Washington, owing to the objections raised by the grain exporters to the grain inspection law now in force, it was thought the Railroad and Warehouse Commission would issue an order permitting a grain handler to ship grain from the interior to himself at the Coast marked "Not subject to inspection," and not have the grain inspected or pay the fee; but this the Commission has refused to do. The Robinson case, now in the courts, involving the question of the shipper's right to do this, will therefore be forced to an issue and final adjudication.

In Kansas they have a new problem in wheat inspection. A new wheat has appeared known as "101 Ranch," a wheat, semi-hard wheat or "iron-clad" wheat, called at Wellington "the biggest joker on the wheat market." It sells for just what the different inspectors see it. It is not soft wheat, for it has a beard, and it does not make good flour. It won't grind. There is a difference of at least 10 cents a bushel in the market between this "mongrel" and soft wheat, and it is said a local mill, when it sells soft wheat flour in Texas, gets \$6.50 a barrel for it; the bearded wheat flour brings \$5.80. "There is no such thing as bearded soft wheat," said George H. Hunter, to a correspondent of a Wichita newspaper. "We are fooled oftener on this so-called 'high grade' wheat than on anything else in the line of grain. Millers are in the market always for pure soft wheat, but it is a hard thing to find and sometimes when it is found it is too hard."

The formal order for the adoption of rules for the uniform grading of grain as prescribed by the National Association has been given by the Missouri

Railroad and Warehouse Commission, and will become effective February 15. Copies of the new rules are now ready and may be obtained of T. M. Bradbury, secretary of the board, Jefferson City; H. C. Nunn, chief inspector, Board of Trade Building, Kansas City; M. C. Fears, deputy chief inspector, Pierce Building, St. Louis; John O. Winn, supervising inspector, Board of Trade Building, St. Joseph.

Although the terminal elevator at Sioux City has been closed, the Board of Trade will nevertheless continue the services of J. A. Silcur, inspector, for another year.

Mixing of kiln dried corn with wet No. 4 corn or No. 3 corn to make a mixture that will grade contract has been prohibited by the Illinois State Railroad and Warehouse Commission.

The agreement under which the Wisconsin Grain and Warehouse Commission and the Head of the Lakes elevator companies at Duluth and Superior have been operating for the past two years was on December 31 renewed for the term of one year. By the end of that time it is believed that a permanent agreement can be made. Under this agreement the elevator companies agreed to put a buyer in the Superior Board of Trade (which has had strong bucket-shop tendencies in the past). In com-

signment of oats might be shipped from destination to some points in the South without ever coming on the tracks of the grain company that was its handler. The dealer would naturally enough be compelled to take the word of the seller (or of the inspector?) and would have no way to protect himself. Now, if the dealer had deliberately mixed feeds and then sold it as pure, he should be held criminally responsible; but in a case of misbranding, such as those complained of appear to be, the dealer seems to be an innocent party, if the shipments were really mislabeled as charged."

ELEVATOR AT ATCHISON.

In view of the activity of the Atchison Board of Trade in the campaign to make Atchison, Kan., an active cash market for grain and a terminal proposition for grain men in the West, it will interest the trade to know that the Blair Elevator Company of Atchison has recently remodeled their elevator (previously owned by the Hall-Baker Grain Co.), and put in practically all new machinery. This gives the plant handling facilities of fifty cars per day at a house having storage capacity for 300,000 bushels. The motive power is electricity, which is found to be very satisfactory.

The Blair Company will handle grain and seeds in



BLAIR ELEVATOR COMPANY'S PLANT AT ATCHISON, KANSAS.

menting on the agreement Secretary A. N. Lent of the Board of Trade said: "While the arrangement does not give us all that we desire, the members of the Board of Trade realize that the elevator men are strongly opposed by the Duluth Board of Trade in their efforts to work out an agreement with the Wisconsin Commission. We appreciate all that the elevator men have done, however, to make things as satisfactory as possible. The placing of buyers on the Superior Board of Trade will enable Superior commission men to dispose of their grain at current prices and they will get the same treatment and as good prices as the members of the Duluth Board of Trade."

GRAIN AND PURE FOOD LAWS.

A case in hearing at Columbia, Tenn., has attracted attention among those acting as shippers of grain into the Southeast and also to brokers in that section interested in or handling that kind of trade. The case is the People, etc. vs. McLemore Grain Co., and Capital Grain Co., of Nashville, the complaint being that of "misbranding of grain and grain products in violation of the state pure food act." The point at interest to the grain man is this:

If a grain dealer is to be held responsible for the misbranding of shipments in which he has merely acted as middleman, or broker, it will place him in a rather hazardous position. For instance, a con-

large way and with ample warehouse room in addition to the elevator storage, will deal in mill feeds, poultry foods and chop feed and operate also a corn chop mill.

The company is owned mainly by W. A. and J. W. Blair and C. H. Blanke is manager.

THE INVENTOR OF THE BINDER.

Chas. B. Withington, inventor of the self-binder attachment to the reaper, died at his home in Janesville, Wis., on December 12.

Mr. Withington, born at Middlebury (now Akron), O., in 1830, the son of a watchmaker and jeweler, early displayed inventive ability, and more than sixty years ago settled at Janesville, where he conducted a machine shop. It was here, along in the '60s, that he began to work out the idea of an automatic sheaf binder attachment for the grain reaper that should add the finishing touch of perfection to that great labor-saving invention by McCormick.

In 1874 Withington took his invention (a wire binder) in a box to the McCormick home in Chicago. It was evening, and C. H. McCormick was worn out by a previous all-night struggle with some other problem, and as Withington talked McCormick, says his biographer, Casson, went to sleep, and when he awoke, Withington, a gentle, sensitive man, easily rebuffed, had picked up his box and was gone. McCormick awoke and realized that a great thing had

been before him—offered to him, and he had let it slip away from him. However, he sent a man immediately to Janesville and brought Withington back to Chicago, where the purchase of the patent was concluded. In the July following it was tried out on a farm near Elgin and cut and bound fifty acres of wheat without the skip of a single bundle.

From this time until 1894 Withington was associated in business with the McCormicks, and did special experimental work for the McCormick interests in his shop at Janesville during the ten years following.

He left a widow and three daughters.

[For the "American Elevator and Grain Trade."]

TRADE MEETINGS AT COLUMBUS.

BY A SPECIAL CORRESPONDENT.

Members of the Ohio Grain Dealers' Association and the National Hay Association held an informal meeting at the Chittenden Hotel, Columbus, on January 10. The main topics of discussion were grain and hay and other matters incident to the future progress and welfare of these two organizations.

The meeting was featured by the presence of Dr. W. O. Thompson, president of the Ohio State University, and Hon. A. P. Sandles, secretary of the Ohio State Board of Agriculture, both of whom made exceptionally fine addresses which proved instructive and interesting to the seventy-five or more dealers in grain and hay who were present.

H. W. Robinson, president of the Ohio and National Hay Associations, was chairman of the meeting.

At the morning session of the trustees, it was decided to hold the next annual convention of the National Hay Association at Cedar Point, one of Ohio's prettiest watering resorts, on Lake Erie, on August 23, 24 and 25.

President Robinson and Secretary-Treasurer J. Vining Taylor of the National Hay Association were appointed on a committee to spend three weeks in investigation in the East to look into the method of weighing and inspecting hay at the big terminal points. The cities to be visited include Pittsburg, Philadelphia, Washington, Baltimore and Boston. The results of their "Lexow trip" will be submitted to the hay dealers at the Cedar Point convention.

Considerable enthusiasm was aroused at the afternoon session and everyone of the hay and the grain men present went away with the feeling that it was good to have been there. Following the addresses of Dr. Thompson and Secretary of Agriculture Sandles, the meeting was turned into a general experience meeting and the way some of the speakers warmed up to the occasion was interesting in the extreme.

President Thompson laid particular stress in his remarks upon giving more scientific treatment to the productivity of the soil, and of putting men at the head of the farms who have intelligence and energy enough to get out of them what must be gotten out of them if this country would measure up to the standard as an agricultural nation which it should. He said: "There are a good many counties in Ohio where the fertility of the soil is not as great as it used to be, just because it has not been properly taken care of. The class of labor on our farms is not as good as it should be. There is need for better and improved service, both as to the care of the soil and the management of the farm. Labor is a big factor in the management of our farms. The work must be well done; but the average hired hand on our farms today does not take the interest in his work that the owner should have to get the best results from his fields. In the manufacturing world this element of labor is better managed. The men have shorter hours and get good pay, but while they are at work they perform a fair day's work for their pay. There has been little or no improvement in the quality of farm labor for the past fifty years. I seriously doubt whether it is as good now as it was a generation ago. Farm conditions are not as attractive as they once were. The man who does

not realize more than 4 per cent on the money he has invested in his farm is not getting enough out of it.

"The farmer of today needs to organize all his forces in order to get the greatest returns from his lands. He should make it his aim to employ married men for his labor, men who have more at stake than merely a day's wages.

"If there should be no increase in our population the next ten years and present agricultural conditions prevail, we shall be compelled to buy wheat in a few years for our own bread. And the whole trouble is, we do not get off our farms what we should.

"The farmer should aim to get the purest product off his farm. His corn should be the best corn he can raise, and likewise his wheat and oats and cattle. Farmers need to be educated along this line. The average farmer doesn't know how to go about it to make his farm more productive, but he can learn, if he chooses to, by observing what others have done and by putting a little intelligence and hard work into his efforts. It is possible to change the quality and quantity of corn by scientific treatment of the soil.

"The thing for this Association to do is to disseminate this education. The modern farm is calling for a higher-class man than it did a decade ago. The percentage of farmers who own their own farms is decreasing. It is not to the interest of the grain dealers or the hay dealers to have it so. We need a little more spreading of intelligence on this problem. We have got to manufacture our progress. Orchards have brought their own pests; wheat has brought its pests; and the man who is going to grapple with these problems most successfully must keep abreast with the times.

"Land if intelligently tilled should become more fertile the older it gets. The farmer of today, or, rather, those who will raise the food that is to nourish our bodies during the remainder of our lifetime, if they would be successful farmers, must be efficient, must be taught, must be educated.

"If we are to save our country in its productive power, we have got to increase our efficiency. It doesn't help any community to have one of its banks fail; it does not do the country any good for one of you gentlemen to fail; failure does not help anyone, it injures all; every man's success is tied up with every other man's. There must be co-operation, mutual interests in one another's affairs, be we grain dealers, hay dealers or what not, if we would have permanent prosperity."

Secretary Sandles heartily endorsed Dr. Thompson's remarks with regard to the care of the soil and the necessity of efficiency on the farm. He paid a compliment to the grain dealers and the hay dealers for the interest which they had manifested in the last state fair which was the biggest and best the state has ever held.

"I believe," he said, "there is a new era coming to Ohio along agriculture lines. There has been a decline in the raising of hogs and sheep, but I believe there is to be a turning point for the better soon. Ohio should not go backward. I am told we are grinding less native wheat than heretofore. This should not be so. Agriculture to a larger degree perhaps than anything else determines the prosperity of our country. We should heed the wise counsel that has been so well expressed here to arouse our farmers to the need of mixing a little brains with their farming, for by so doing soils may be kept fertile for hundreds of years.

"This Government should give less attention to building battleships and more attention to education and agriculture. Why, of every three dollars that this Government spends two go to build a stronger navy and improve our soldiery. Just think of it, 58½ per cent of the National income is devoted to war purposes each year, while about 6 per cent goes to schools and agriculture. I don't think it is a good business proposition to spend so much money to shoot brains out of a man's head; what we need is to shoot brains into his head.

"One of the greatest problems which the Nation is facing today is as to how it will feed itself. We have got to improve the productivity of the soil if

this problem is to be solved. You grain dealers and hay dealers can help much to encourage the dawn of a better era if you will carry back to the farmers in your respective communities some of the good things you have heard here today."

Mr. Morgan, a hay dealer of Pittsburg, followed Secretary Sandles with a few timely remarks on the hay situation. He said that hay would be a better proposition to handle the next twenty-five years than it had been in the past. The time is coming when hay can be handled the year around with profit. Large storage barns or granaries will be built in the big shipping centers and the hay garnered as grain is garnered. When this is done, hay will then be handled judiciously and with profit the year round. He advised the grain dealers to erect their own storage houses for the conservation of their grain and their hay. Having hay in stock for future delivery would put the hay business on a better basis than it is at the present time.

Wesley Hardman, a hay dealer from Woodstock, Ohio, severely criticised the Eastern system of "weights and inspection." He intimated that the "fellows at the terminal points have kept the patches on my trousers for the past ten years by their unfair methods of weighing and inspecting hay."

Chairman Robinson declared that much of this trouble could be avoided if the "fellows at home would only be a little more careful in properly grading their hay before shipping it out."

The meeting was adjourned in the midst of lively discussion on the aforesaid subject to permit the members to attend in a body the corn show in progress in the city during the week.

THE CORN SHOWS AT COLUMBUS.

The big show held in Columbus during the week by the Ohio Corn Improvement Association was a success in every respect. Many visitors were present from all over the state. Corn and apples were shown, and authorities pronounced the exhibits to be fine. There were 331 individual entries from 37 counties, and in addition there were 85 varieties not in competition but exhibited merely to show the effect of climate and soil of the different counties of the state. A latitude of 55 counties was secured for this demonstration; and while the ears were all of the same variety because of climatic and soil conditions, they were so different as to baffle identity.

In Reid's Yellow Dent and the Leaming corn, striking examples of this were shown.

The show was in charge of Prof. E. A. Lloyd of the Ohio Agricultural Experiment Station at Wooster. He said that it does no good to try to raise in one state the kind of corn produced in another state. A variety which thrives in a certain climate and soil may not do so at all elsewhere where conditions are different.

Prof. E. G. Montgomery, of the Nebraska State Experiment Station, judged the show. He addressed the farmers on practical corn-raising.

The apple exhibit was one of the best ever seen here. It comprised apples raised by the State Experiment Station, with which the officials have been experimenting. Prof. Green, of the institution, gave valuable information on apple-raising. He said that while the fruit in the Oregon-Washington fruit belt has a finer luster than that of Ohio, the product of this state excels it in flavor.

Utah's grain production—wheat, oats and barley more particularly—has grown to such an extent that there are now twenty elevators in the state, having a combined storage capacity of a million of bushels.

The new rule affecting telegraph tolls on made words, such as flour brands, like "Ceresota," "Minikota," and the like, does not specially embarrass grain dealers who seldom have use for words not taken directly from the eight principal languages of modern Europe, which are regular under the rule, which makes the charge for such words by counting each five letters thereof as a word. The rule will no doubt compell additions to be made to the private codes of millers and others who may be using as brands that type of words.

INDIANA GRAIN DEALERS' MEETING.

The Indiana Grain Dealers' Association held its eighth annual meeting in the Board of Trade Assembly Room, Indianapolis, January 11 and 12. President W. B. Foresman of Lafayette called the Tuesday morning session to order at 10:30 and introduced Hon. Lew Shank, Mayor of Indianapolis, who welcomed the dealers very cordially to the capitol city, and on the conclusion of the Mayor's remarks John W. McCardle moved that the Association tender its thanks to the Mayor for his address, and the motion carried.

E. M. Wasmuth of Roanoke responded to the Mayor's address on behalf of the grain dealers and thanked him for the hearty good will in which he had welcomed them.

President Foresman read his annual address as follows:

Members of the Indiana Grain Dealers' Association and Friends:—Having once more closed another year of hard work in the interest of all members of the Indiana Grain Dealers' Association, we have this morning gathered together in our eighth annual meeting. I doubt if there is one member who can say that he is not satisfied and would wish to be dropped from our roll; while on the other hand, we have greatly increased our membership over last year; and I am rejoiced to see the members becoming more and more convinced that they are profited by the benefits of this Association.

As President I am proud to have read to you all this morning, the Secretary and Treasurer's report, which will prove to you that every year the live, active dealers are realizing the importance of such an association. At first it was certainly an uphill business, organizing the Indiana Grain Dealers' Association, as each one was fearful that his farmer customers would get on to his attending grain dealers' meetings, and for that reason they all laid back in the harness; and it took several years for them to realize that the Association was doing their farmer customers as much good,—while not in a direct way, it certainly was indirectly; and now it is an unusual thing for a merchant in any line of business, or banker, undertaker, insurance writer,—and in fact, I defy any one to name any one in any kind of business who is not in some manner affiliated with his own business association.

I am not talking for members this time, my dear friends, as that was my principal topic last June, and am more than pleased with the success this Association has accomplished during my administration. I can assure you I tried to leave no stone unturned; but do not take me wrongly, and gather from what I have said that I am giving myself the credit for this Association's success. It has been through the efforts of all our enthusiastic members and the good hard work done by our very worthy and hard working Secretary, Mr. Dillon, and his very able assistant, Mrs. Bronson.

During my administration I have had the pleasure of attending local meeting at Ft. Wayne, Laporte, Kokomo, Anderson, La Fayette, Ind., Peoria, Ill., and Columbus, Ohio. I am glad to inform you that one of the best locals we have is the one at Laporte, which has been organized only since last summer. We had quite a time getting them together and were compelled to go and sit and look at empty chairs on several different called meetings; but after most of them,—not all at one time, but after each meeting, each one letting his neighbor know what was done, and inviting and insisting upon his attending the next one,—we succeeded in getting quite a nice representation. And only a few weeks ago they gave a very nice banquet (of which I will let Mr. Dillon tell you in his speech); the attendance was immense, and I am told at every meeting, and they hold them quite often, they have a full attendance.

I am glad to advise that northern Indiana has taken considerably more interest during the past year, holding regular meetings at Laporte, Fort Wayne, Warsaw and Plymouth.

When I entered upon my duties as President of this Association I thought, and in fact, felt sure, there would be nothing more to do; but having served for the past twelve months, I find it is just commencing, and the duties of the Association are becoming more and more numerous; and in order for it to accomplish them it must be supported by its hard and efficient working members.

Every one of the grain trade associations is organized primarily for the promotion of the interests of all. There is not a selfish principle to be found in the constitution or by-laws of any of them. The supporters give up their money and help the entire trade, and every one engaged in the business shares in the benefits of the work, so that non-members not only should be glad to accept the first invitation to join with their brother dealers in promoting common interests, but they should be more than willing not only to join the Association but to induce others to do so.

As I stated in the beginning of this paper, most every merchant in any line of business belongs to his business association, and many of them hold annual meetings covering a week and secure an attendance of thousands, where the grain trade secures only hundreds; and what is more, most of the trade organizations in other lines assess their members much more heavily than does the grain trade, and pay secretaries a sufficient salary to enable them to go about in the interests of the trade without hesitation as to the expense.

As I have told you, during my term I have attended meetings in states other than our own; but do not think any of them has accomplished more than have we; and not one of them has members that are any more loyal than some of our good old war horses, organizers, and never-quitting members of this Association. To them I wish to extend my most sincere thanks for their loyalty toward me; and I trust that they may be able supporters of my successor and that they may have the pleasure of meeting with us many more times on these annual occasions.

I wish also to thank our Secretary and his assistant for their courtesies and for the efficient attention to the office and work, and I trust that the coming year will be the banner one for this Association.

SECRETARY'S REPORT.

Secretary M. T. Dillon of Indianapolis then read his report as follows:

Mr. President and Grain Dealers:—Your Secretary begs leave to submit the eighth annual report of the Indiana Grain Dealers' Association, for the year ending Dec. 31st, 1909:

In the past year your Secretary has attended 73 meetings of the different locals, made 44 special trips, made about 400 personal calls and traveled over 4,000 miles.

On June 25th the La Porte local was organized with J. P. Ruple, president, and J. A. Wambaugh, secretary and treasurer, with a membership of 18, making now eight locals in the state.

The Association, in completing its eighth year, is to be congratulated on the increased membership. New members received, 69; members dropped and withdrawn, 29; making a net gain of 40 for the year. The membership is as follows:

Shippers	255
Receivers	53
Special, or Honorary.....	5

making a total of 313, the largest membership the Association has ever had.

Since our last annual meeting there have been five arbitration cases filed, three have been agreeably settled without calling on the committee, and two are still pending.

There is no line of business now of any magnitude that is not organized, and the members meet and discuss the better ways of transacting their business. Why not the men in the grain business, especially the country shipper, for he is the man that takes it from the producer. In the Association he has good protection against unfair dealers. He has a greater respect for his neighbor, and in "Union there is strength." Indiana with the banner corn crop this year should be one of the strongest Associations.

I wish to thank the members for their prompt financial and moral support in the past year, as I have never called on any member for assistance in the work but he was ready to give his time and leave his business for the good of the Association.

Every grain dealer in the state receives the benefit of the Association's work, while less than half bear the expense. I would suggest that every member make a special effort to tell his neighbor dealer the benefits and try and get him to join the Association.

Following is the financial report of the Association:

Statement up to January 1, 1910:

Receipts.	
Account of dues.....	\$2,877.45
Account Add. Sta.....	540.00
Miscellaneous receipts	813.00
Cash on hand, January 1, 1909.....	117.28
Total	\$4,347.73
Disbursements.	
M. T. Dillon, Secretary, salary.....	\$1,637.50
E. F. Bronson, stenographer, salary.....	545.00
Board of Managers.....	17.25
Grain Dealers' National, dues.....	227.50
Traveling expenses	473.77
Printing and postage.....	665.59
Office expenses	482.03
Expenses banquet, mid-summer meeting...	78.00
Donation entertainment of National meeting	100.00
	\$4,226.64
Cash in treasury, January 1, 1910.....	121.09
	\$4,347.73

It was moved by John McCardle that the reports of the president and secretary be adopted as read. Carried.

TREASURER'S REPORT.

Bert A. Boyd, treasurer, made the following report:

Report of receipts and disbursements by the treasurer of the Indiana Grain Dealers' Association for the year ending December 31, 1909:

Receipts.	
Cash on hand Jan. 1st, 1909.....	\$ 117.28
Receipts during the year.....	4,138.70
Total.....	\$4,255.98
Disbursements.	
Warrants Nos. 805 to 933 inclusive, paid during year	\$4,148.64
Balance on December 31, 1909.....	\$ 107.34
1910.	
January 1, To balance cash on hand.....	\$ 107.34
January 10, To deposits to date.....	619.50
Total.....	\$ 726.84
Disbursements since Jan. 1st, 1910.....	43.48

Leaving actual balance cash in hands of treasurer at close of business Jan. 10, 1910.....\$ 683.36

President Foresman made a short talk on the financial affairs of the Association, showing how greatly the financial condition had improved the past two years. His remarks were received with applause.

The chair appointed the following committees: Resolutions—Messrs. Wellington, Sowash and Brookie.

Nominations—Messrs. Morrison, Ashpaugh, Kuhn, Kennedy, Donlin.

BUYING GRAIN BY THE HUNDREDWEIGHT.

Herbert H. Deam of Bluffton, Ind., read a paper on the subject, "Benefit of Buying Grain by the Hundredweight," as follows:

We are living in the best age the world has ever known, and the advance that has been made along all lines has far outreached the fondest hope of the wisest. The customs and most common place things that were used in every day life fifty years ago are hardly thought of to-day. It used to take days and weeks to go to the city markets to buy or sell, but now-a-days with the new improvements, such as the telephone and telegraph, we sit in our office and call Chicago or New York and sell a car of grain and within three to five days the grain is on the market and sold, whereas it used to take that many weeks to do the same thing.

A few years ago some one advocated the idea of buying corn by the hundredweight, and a great many people said it will never do; you can't handle it that way, but now it has become so common among the dealers of the Middle West that almost all buy it that way. The hundredweight is the common unit for almost all commodities. There can be no mistake about the quantity when you speak of a hundredweight, but if a person who is not engaged in the grain business hears you speak of a bushel of barley, rye or oats or even the more common grains, wheat and corn, they will almost invariably say, "How many pounds do you take for a bushel?" While on the other hand, when you mention a hundred pounds of any grain they at once know what quantity you mean. The time was when grain was handled by measuring in half-bushel measures, but this is a thing of the past; in fact, you seldom ever see a half bushel measure for any purpose except to make a test.

If grain were handled by the hundredweight it would do away with all possibility of making a mistake in computing the price of a load of grain. It is so much easier to count up a load of oats that weighs 2,400 pounds by counting at \$1.25 per hundred, which is \$30, rather than to say 40 cents per bushel of 32 pounds, having to divide by 32 pounds to find there are 75 bushels and then multiply by 40 cents per bushel, which brings the same result. The whole thing, of course, is only a matter of custom; and as customs change with every generation, it will only be a matter of a very short time when all dealers will adjust themselves to the condition.

The one thing of handling corn in the fall of the year, when it is not yet dried out, gives rise to the inquiry at once by our farmer friends as to how many pounds per bushel you take; but now that we buy it by the hundredweight that question is never asked; they simply expect you to take a hundredweight, which does away with all possible dispute. The laws of the states are different with reference to the amount that should be taken for a bushel at certain seasons of the year; while if all were agreed to handle by the hundredweight this question of amount would be settled.

A case came to my notice recently. A farmer came to my office in September to sell a thousand bushels of ear corn for December delivery, and we

agreed with him on the trade. When December came the corn was delivered and nothing had been said about the number of pounds to be taken per bushel. When the time came for settlement, it appears the law makes 68 pounds per bushel in December while we had expected to take 70 pounds per bushel. In fact, giving little thought at the time of the contract as to this, this gave rise to a dispute, the difference between us being 2,000 pounds, or about 30 bushels of corn, which if the trade had been made per hundredweight there would not have been a controversy.

A few years ago the Chicago markets adopted the system of handling seed by the hundredweight and it took some time for the country to get accustomed to it, and in fact, we are not accustomed to it now; but if the whole country were on the same basis, it would soon be easy for us to quote by the pounds or hundredweight rather than by the bushel.

One of the strong points in my opinion in favor of the handling of grain by the hundredweight is the fact that our railroad rates are all per hundredweight, and the problem of arriving at the various market quotations, when bids are made per bushel and our freight rate per hundred and some of our bids are our track while others are delivered prices, gives rise to a complication.

As I said in the start, this is an age of advancement and the American people want the practical things, the things that bring results in the quickest and easiest way eliminating as far as possible the chance for mistakes. I am convinced that if we were united the country over on a basis of the handling of all grain and seed by the hundredweight we would after a few months wonder why we had not seen this long ago.

Some one, I fancy, is saying, What are you going to do in a year like the past one with off-grade wheat, when much of the wheat is so poor that it will not test over 50 or 52 pounds? This is easily answered by saying that we will always have to use a tester and the price we pay per hundredweight would have to be regulated by the quality of the grain, just as we now do buying it by the bushel.

Again, I think I hear some one say, why then do you not continue buying by the bushel since the tester is necessary. For the simple reason as stated above, the hundredweight is the standard weight by which practically everything except grain is gauged. I am quite sure if we were to stop for a moment and make some comparisons we would be agreed that the best plan for handling grain is by the hundredweight.

Take, for example, 5,000 pounds of wheat at \$2 per hundred equals \$100. Its equivalent, according to our way of figuring to-day, is 83 bushels 20 pounds at \$1.20 per bushel equals \$100.

Or, further, take 5,000 pounds of oats at \$1.25 per hundred equals \$62.50. Its equivalent according to to-day's methods is 156 bushels 8 pounds at 40 cents per bushel equals \$62.50.

And again, 5,000 pounds of shelled corn at \$1.16 per hundred equals \$58, or its equivalent of to-day, 89 bushels 16 pounds, at 65 cents per bushel, is \$58. I might go on to show by similar figures on different kinds of grain.

The strong point, I think, in favor of this theory is the simple fact that every load of grain has to be driven on the scales to be weighed and then we go to the trouble of finding out how many bushels this load contains according to a standard of measurement which was adopted long ages ago. Why not do away with all this unnecessary amount of figuring and decide at once the price per hundred, make a simple computation and arrive at the value of the load in a much shorter space of time?

I leave this question with you and hope that each man in this assemblage will give the matter a fair and impartial consideration; and I think that every fair minded man will agree that the easiest and most practical way of handling all farm products will be on the basis of the hundredweight.

T. A. Morrison told of his experience in buying by the hundredweight, and said it was merely a matter of the education of one's customers. They had always found the method satisfactory and the farmers in their territory would now refuse to do business in any other way.

John McCardle said he believed in advancement and progression in business, and that of the gentlemen in the grain business believed that the hundredweight was the correct method of buying grain, it should be put in vogue in his elevator.

J. W. Witt of Lebanon: I am with the gentlemen in all other respects except this. So long as we sell by the bushel I cannot see my way to buy by the hundredweight. I am not educating the farmers, for I find they know quite as much as I do. I think that if this practice is commenced it should be begun at the beginning of the crop year and not now. If the time comes when we can sell by the hundredweight it will be time to buy in

this way. The only thing we sell by the hundredweight is clover seed.

Mr. Morrison again said that Mr. Witt and others could eliminate all their troubles by buying by the hundred pounds.

E. H. Culver: This matter has been taken up by the Millers' National Federation and is now under consideration by that body. I think that terminal markets would follow the grain men in dealing in 100-pound units. It would save time in quoting by the hundred pounds instead of by the bushel and I think the time will come when all transactions in grain will be done by the hundredweight.

C. B. Jenkins said that he had bought only by the hundredweight in the case of ear corn. He thought it was the only method and that the practice should become universal.

Geo. C. Wood said that after the grain dealers of Kokomo and the north had tried the experiment of buying by the hundredweight and found it satisfactory, he had fallen in line. He thought the practice a good one.

E. M. Wasmuth said that in his territory the dealers had been buying corn by the hundredweight for the past five years. There are but few farmers but have had intelligence enough to understand the system.

E. M. Wasmuth moved that Mr. Deam be requested to write a resolution covering the question and refer same to the committee on resolutions. Carried.

By a rising vote it was shown that practically all dealers present favored buying by the hundredweight.

The meeting then adjourned for luncheon.

TUESDAY AFTERNOON.

The afternoon session was called to order at 1:30 by President Foresman, who introduced the first speaker on the afternoon program, C. B. Jenkins of Noblesville, who made a brief address on the subject, "Why some 58-pound wheat free from smell is not good milling wheat."

Mr. Jenkins said that had he selected his subject it would have been, "Why is there no more 58-pound wheat shipped from the country than there is?" The milling receiver is diametrically opposed to the shipper in this, that the man who mills the wheat must remove all the impurities. To the shipper 58-pound wheat is No. 2, and the shipper must only reduce the impurities to make the wheat pass as No. 2. I can tell you from actual figures on our books that it took 17.8 pounds more wheat to make a barrel of flour this year than last. It took 13.8 pounds more of clean wheat to make a barrel of flour. These figures show the enormous difference in the condition of the wheat as compared with last year. We clean all our wheat and take the impurities out, and in doing so made a profit. If the dealer would buy his grain according to its grade he would do a great deal better than if he did not. A dealer should keep his off-grade grain separate. He would then be able to ship more 58- and 59-pound wheat.

Geo. C. Wood: This wheat proposition is about as bad as the wealthier reports. There is something about it I do not understand. If you buy wheat on its merits, will you do so by testing it? I bought wheat last year principally on test and one car which I tested myself as 59-pound I sent to Florida and they wanted to discount it 24 cents a bushel. It went two pounds at Toledo less than my test. There was something wrong somewhere. I can never make any money handling wheat.

Mr. Culver of Toledo here interrupted Mr. Wood and said he must have had an antiquated tester.

Continuing, Mr. Wood said there was quite a premium on July wheat last year. He had a circular from a Cincinnati firm offering \$1.24 for No. 2 wheat if shipped in July. We accepted the offer, and got our wheat out in July. Our first shipment went No. 2, but later shipments of the same wheat did not go better than No. 4. There was something wrong about this. The only way to buy wheat is by test.

Mr. Culver said a great deal of 58- and 59-pound

wheat went to the Toledo market. Wheat that did not grade 58 pounds sold at a 24-cent discount because of its condition, as it contained some "tombstone" wheat and impurities. No. 2 wheat at Toledo always commands a premium and they took care to keep up its grade.

Mr. Deam said early in the season some of the wheat which tested 59 pounds contained tombstone wheat. It is folly for us to expect that wheat containing tombstones would grade No. 2. It had to be bought not according to its test but on its quality.

C. T. Seward, said they had bought all their wheat by test and had made money.

E. A. Feight of Frankton: One of our grain men was very much dissatisfied with the discounts on our wheat. We made investigation and afterwards bought our wheat according to its grade. We then were able to make some money.

President Foresman announced that they would hear the reports of district associations. The first association heard from was Eastern Indiana.

Mr. Elliott: We are getting along very nicely. It has been our aim to look after our troubles at once. We have tried to keep in line ourselves and keep our neighbors in line. The Association has been a great thing for our community.

E. W. Phares, for the Central Indiana Association, reported that they were in as good shape as any in the state. Our wheat has been all off-grade stuff. We have made money because we followed the established discounts.

Charles Ashpaugh of the Franklin Association said that he thought all their members were in attendance and that fact spoke well for the organization. I do not believe that we meet without strengthening our Association. We settle all our difficulties very easily and feel that it is essential that we meet frequently.

R. A. Kuhn reported that the Plymouth Association was in satisfactory condition.

T. P. Riddle said they had been doing a great deal of missionary work in the Fort Wayne district in promoting a more complete organization. Good results were being obtained and while elevators and dealers were thickly strewn throughout the territory, yet with the help of organization and with large crops to draw from there was no reason why the dealers could not do a satisfactory business.

S. W. Strong, secretary of the Illinois Grain Dealers' Association, was present and on being called upon by the president said he came over primarily to make a visit. He reported that everything in Illinois is harmonious and grain is being handled in the whole at a fair profit by dealers.

The meeting then adjourned.

WEDNESDAY MORNING.

The final session of the meeting was called to order by President Foresman at 10:30 and reports were heard from the LaPorte and LaFayette local associations.

E. K. Sowash submitted the following report of the committee on resolutions:

ANTI-FUTURES LEGISLATION APPROVED.

Whereas: A decline of 6 cents per bushel in the price of December wheat, during the last half-hour of the session of the Chicago Board of Trade, December 31st, 1909, is but one of the myriad evidences that quotations on the aforesaid Chicago Board of Trade are subject to frequent and unjust manipulations; and,

Whereas: This condition in any market of great influence can but be detrimental to the grain trade in general; therefore, be it

Resolved: That this Association favors the application of such National legislation as may be necessary to eliminate as much as possible all gambling in the food products of the Nation; and,

Resolved: That a copy of these resolutions be sent to each of the senators and representatives of the state of Indiana, in the National Congress.

NATIONAL CORN SHOW.

Whereas: An Indiana man has won the National trophy for the best ear of corn exhibited at the National Corn Show, held at Omaha, Nebraska, and not only has this distinguished honor been given to a citizen of our state, but other honors and other prizes have been won by Indiana men; therefore, be it

Resolved: That it is the sense of the Indiana

Grain Dealers' Association here assembled that all efforts on behalf of its members directly, or indirectly, be put forth to secure the National Corn Show to be held in this Capital City at such time as will be best for the officers and members of such National Corn Show.

IMPROVING QUALITY OF CLOVER SEED.

Whereas: The quality of the home-grown Clover Seed in Indiana is steadily deteriorating, showing more foreign and foul seeds; and,

Whereas: We believe no small part of the blame for this condition lies with the elevator men and seed dealers in not using sufficient care in the selection of seed to be sold their farmer customers; therefore, be it

Resolved: That members of this Association use every effort to improve the quality of the clover seed grown in the state by handling only the purest seed obtainable, and by a campaign of education with the farmers of their immediate neighborhoods, that shall result in better care in selection of home-grown seed on the farm.

THE HUNDREDWEIGHT UNIT.

Whereas: After careful and thoughtful consideration, taking into account the experience and the practice in other countries and the experience and the practice in this state with respect to corn, it is the consensus of opinion of this Association that the interests of the grain trade would be appreciably advanced by the universal adoption, throughout the United States, of the practice of buying and selling grain by the hundredweight.

Be it Resolved: That the Indiana Grain Dealers' Association advocates and labors for the universal adoption throughout the United States of the practice of buying and selling grain by the hundredweight; and that we petition the Grain Dealers' National Association to pursue the accomplishment of this recommendation.

TARIFF ON GRAIN.

Whereas: It is a fact, self-evident, that the present high tariff on wheat, corn and oats is in no way a protective tariff in times of surplus production in the United States, and always a tax in time of short supply; therefore be it

Resolved: That the Indiana Grain Dealers' Association favors and does hereby recommend the absolute elimination of all import duties on wheat, corn and oats; and be it

Resolved: That a copy of these resolutions be forwarded to senators and representatives of the state of Indiana in the National Congress.

The committee further reported as follows:

Your Committee on resolutions desires to report that it has considered all matters presented to it and especially the reports of the officers presented at this session.

We wish to endorse the untiring efforts on the part of our president, secretary and assistant secretary as well as other officers in getting new members into the Association.

We also extend the thanks of the Association to the various gentlemen who have contributed to the success of the meetings by papers, addresses, etc.

We express our grateful appreciation of the favor extended by the management of the Board of Trade in granting us the use of the assembly room for this meeting.

We appreciate the efforts of the track buyers and receivers of this city for the entertainment furnished us, also for the manner in which the Grain Dealers' Fire Insurance Co., of Indianapolis, handled our register.

E. M. Wasmuth, for the auditing committee, reported that the committee had gone over the books of the Association and found them correct.

John W. McCardle read a paper on the subject, "Evil of Engaging Grain for Future Delivery from the Farmer." He prefaced the reading of his paper with a few remarks in which he expressed his high opinion for the grain business and the benefits which resulted from organization. He hoped that all the Indiana grain dealers would lend their aid in securing the next meeting of the National Corn Growers' Association at Indianapolis.

Mr. McCardle's paper was as follows:

EVIL OF ENGAGING GRAIN FOR FUTURE DELIVERY FROM THE FARMER.

A subject fraught with many difficulties will never be solved until a uniform contract is made, in which is provided such conditions that will compel both parties to carry out to the letter the provisions incorporated in said contract.

After being engaged in the buying of grain of the farmer for twenty-four years, this subject has been very annoying, and I have given the matter much careful consideration. I doubt if a perfect arrangement will ever be made in buying and contracting grain from the farmer. It is not all the farmer's fault, because of the annoying conditions and disappointments in the selling and contracting of his grain.

My experience is that the American farmer is an honest man; and when you buy his grain, if you

will take a little time in going over the conditions pertaining to the purchase of the grain, either in a written or verbal contract, you will have little cause for complaint. Usually the farmer comes to sell you his grain, and in the conversation he offers you about 1,000 bushels (by the way, this word "about" has lost me a great deal of money) at the price you agree upon. The dealer says, "all right," not thinking that the market will not be at one price all the time; but the farmer knows that he sold "about" 1,000 bushels of grain. If the market goes up, he may not have over 700 bushels; if it goes down, he may have 1,300 bushels. The word "about" is so very indefinite that he thinks he can take advantage of it and he does.

This does not prove him dishonest; but on the other hand, he flatters himself, because he has applied one of the sharp, shrewd American farmer's tricks to the grain buyer. It may be morally wrong for the farmer to sell his grain this way; but if it should be morally wrong, it is equally wrong on the part of the grain buyer to do his business in such a careless manner. After many years' experience in buying grain, I find many farmers object to signing a written contract; and I adopted a very simple plan, and it is this: John Smith comes in and contracts "about" 1,000 bushels of grain. "All right, John Smith." I just take a little book out of my pocket, write in the book the following: "This day John Smith has sold to the Brown Grain Company about 1,000 bushels of grain (at whatever price is agreed). Mr. Smith has the privilege to deliver on this contract for the maximum amount 1,100 bushels and for the minimum about 900 bushels"; and I read this to Mr. Smith so he will know how much grain to deliver on this contract.

I found this plan the most satisfactory of any except a contract written or printed in full with the signatures of both the buyer and seller attached. I recommend, however, where it can be done the written or printed contract, giving full details of the transaction, with both signatures.

When the local grain dealer begins business, it is his intention not only to buy all the grain he can, but in doing so he must try and adopt such plans that will insure the return of his patron. In other words, your success depends largely upon the fact of establishing a trade and keeping it; and to do this you must not be too technical in your demands to have the transaction all your own way.

I firmly believe in the contract system of buying grain from the farmer. It eliminates all doubt as to what your agreement was; but should your customer be inclined to refuse to sign a contract, your next move would be to get your small book from your pocket, write down the purchase of grain and then read to the farmer that he has the option, if the market goes up, to deliver 100 bushels of grain less than he really sold, and if the market goes down the same conditions will apply; and in my judgment your trade will increase instead of decrease.

As grain buyers, we have many difficulties to overcome and we are largely responsible for them—careless in not fully understanding trade conditions; in short, we are always in too big a hurry to even transact our business on business principles. This same careless way we apply to the farmer in the purchase of his grain; and I might add right here that most of the misunderstanding between the grain buyer and the farmer is the fault of the grain buyer. In the purchase of his grain, if you will exercise a little care, take a little time, and be very careful of the words "about" and "all right," little difficulty will be had either upon the part of the buyer or the seller.

Speaking of contracts in general, I wish to add my commendation to the contracts and business rules applied to the terminal buyer. Little trouble have I ever experienced in the past twenty-five years of selling grain to the terminal buyer, and the reason for this is that his contracts are of such a character that you fully understand all their conditions; and I might say further, that should a dispute arise as to the interpretation of the contract of a terminal buyer, you will find him always ready to meet you more than half way to effect an adjustment. This is all brought about because certain fixed rules have been adopted by this terminal buyer in order that he can give to the country grain dealer a "square deal."

In conclusion, briefly let me admonish you all that it is the "square deal" we are looking for. Let us have more of these meetings. Let us mingle with each other. It is the better acquaintance we have that brings friendship, and this means more than language can express. It means pleasant relations—pleasant social relations, pleasant business relations; and from these we are assured of a successful business career.

Let the new year with its splendid possibilities for an increased business remind us of a solemn duty we owe to each other, that when differences of opinion exists, apply the Golden Rule.

Mr. Riddle of Fort Wayne spoke in commendation of the paper and said he was glad to hear recommended to dealers that they invariably employ written contracts.

Mr. Dunlap said he had never been satisfied with the contract system. It promotes a spirit of speculation to begin with, both in the farmer and the grain dealer. By its aid you can contract for a large volume of business without much money involved. It also introduces a large amount of uncertainty into the business. It offers a temptation to overbuy and overspeculate, causing more or less danger there. When you go to contracting it causes many little turns, so that your competitor doesn't know what you are doing. It begets suspicion on the part of your competitor and prevents in a degree a feeling of harmony with him. If you wish to do a straight commercial business in buying and selling, why contract? Every farmer wants to sell at the top, and this is impossible to do all the time. We make some time and lose some time, but in the long run there is nothing to be gained. If a dealer wishes to speculate, he should go in the speculative market.

T. R. Riddle said it wasn't a question of contracting for stuff but of getting the contract down in black and white. Dealers are driven to contracting by farmers in very many cases, and if one will not do so another will. Personally I would rather not contract with farmers for grain.

Mr. Seeds of Columbus, Ohio. I think the general sentiment among Ohio dealers is against contracting with farmers. The general opinion at our last meeting was that it was best to buy when the grain was ready.

Mr. Moor was of the opinion that dealers made a mistake in contracting for grain and that the buying of grain should be distributed throughout the year.

Mr. McCardle did not see how dealers could refuse to buy the farmer's grain when he wanted to sell it. All commodities are sold on contracts. If you take speculation away from anything, there isn't much left. If the dealer did not buy his grain right, it was his own fault.

O. J. Thompson: In times past I have contracted for a good deal of grain but on account of opposition I have largely discontinued it. I do not see how speculation enters into contracting grain if you do business on the right principles. It is not fair to the farmer to refuse to buy his grain when he wants to sell it. The dealer can protect himself against loss if he chooses.

Mr. Seeds said if you eliminate speculation from a business, you kill it.

Mr. Higgins said he thought they ought to discontinue the contracting system, but when they did contract they should make the contracts in written form.

President Foresman related the experience of his firm in contracting with farmers. All contracts had been written and no farmer had defaulted in his contract.

ELECTION OF OFFICERS.

Tom Morrison of the committee on nominations read the committee report, recommending the election of the following officers:

President, W. B. Foresman, LaFayette; vice-president, A. W. Taylor, Stillwell; member of board of governors to serve three years, C. Moore, Waynes-town, E. K. Sowash, Middletown.

The report was adopted.

After several short speeches by the officers the meeting adjourned.

NOTES OF THE MEETING.

T. J. Stoffer of Alder Grain Co. represented the Buffalo market.

Big Chief Culver of Toledo was accompanied by braves E. L. Southworth and Fred Yaeger.

The Pittsburgers who renewed acquaintances were H. G. Morgan, W. F. Heck, F. L. Davis.

Fred W. Scholl attended from Louisville, W. Leroy Snyder from Baltimore and T. A. Bryant from Milwaukee.

The Ohio visitors were E. W. Seeds, Columbus, Harry Kress, Piqua, C. N. Cunningham Tiffin, E. A. Gribbs, Greenville.

The register was in charge of the Grain Dealers' Mutual Fire Insurance Co. and each dealer tagged

with a badge to prevent his straying far from the meeting without recognition.

Grain elevator builders were C. E. Flora of Reliance Construction Co., Indianapolis and N. A. Graybill of Anderson.

S. W. Strong, secretary of the Illinois Grain Dealers' Association, made a neighborly call and addressed the meeting.

From Chicago there were Arthur Sawers, J. J. Stream, R. W. Carder, O. C. White, A. E. Hartley, P. S. Goodman, Harry T. Smith.

Cincinnati sent a good delegation consisting of A. C. and P. M. Gale, W. R. McQuillan, T. E. Fleming, W. H. Barnes, Henry W. Brown.

An unfortunate accident on Monday in which he lost the fingers of his left hand, prevented T. O. Stanley of Lyons Station from attending the meeting.

Fred W. Kennedy of Shelbyville, Ind., manufacturers of Kennedy's Car Liners, distributed a pen holder among the dealers for the purpose of writing orders.

It takes practice to get the hand cuffs off and out of the straight jacket with the facility of Bert A. Boyd at the smoker. But we are asking no questions.

The machinery men attended every session. They were B. D. Heck of Philip Smith Mfg. Co., Sidney, Ohio; J. H. Pank and C. N. Hogle with Invincible Grain Cleaner Co., Silver Creek, N. Y.; F. H. Morley with Avery Scale Co., No. Milwaukee, Wis.; A. H. Smith with Huntley Mfg. Co., Silver Creek, N. Y.; W. N. Goodman and C. E. Downey with Richardson Scale Co., New York; O. H. Judkins with Nordyke & Marmon Co., Indianapolis.

The smoker on Tuesday evening was well attended. The only speaker was Fred C. Palin of Newtown, Ind., winner of the Grand Champion Sweepstakes for the best single ear of corn at the National Corn Exposition held at Omaha last year. Mr. Palin told a great deal about corn, its breeding and cultivation and asked the dealers to aid in securing the next annual meeting of the National Corn Growers' Association at Indianapolis. Several vaudeville stunts followed and later, refreshments were served in the Board of Trade dining hall.

The dealers who attended include: W. B. Foreman, LaFayette; H. H. Deam, Bluffton; Cloyd Loughry, Monticello; W. A. Summers, Ambia; B. E. Page, Mellott; E. Hutchinson, Arlington; R. A. Kuhn, Argos; H. L. Brown, Auburn; D. L. Brookie, Frankfort; R. S. Stall, Thornton; J. W. Witt, Lebanon; E. A. Feight, Frankton; Ira Cadwallader, West Lebanon; J. C. Batchelor, Sharpsville; C. M. Barlow and C. T. Seward, Kokomo; J. S. Hazlerigg, Cambridge City; E. K. Sowash, Middletown; R. F. Cohee, Frankfort; Chas. A. Ashpaugh, Frankfort; O. J. Thompson, Kokomo; Jas. Wellington, Anderson; E. L. Harris, Greencastle; T. A. Morrison, Frankfort; Wm. Nading, Shelbyville; Carry Jackson, Rushville; Thos. Bodine, Covington; J. L. Schalk, Anderson; M. L. Conley, Frankfort; Wm. Donlin, Delphi; A. E. Betts and Frank Kelley, Frankfort; J. M. Gordon, Summit; John Holliday, Greentown; D. D. Terhune, Sinton; N. O. Davis, Frankfort; E. E. Van Steenberg, Manson; John Howell, Carmack; W. M. Basley, Milroy; C. S. Patten, Moorestown; Geo. C. Wood, Windfall; F. J. Baird, Advance; C. H. Wade, Paris; W. H. Arman, Pendleton; W. C. Lutz, Bunker Hill; J. P. Rauschart, Cassville; T. N. Hill, Shelbyville; S. A. Miller, Mulberry; Aaron Gardner, Cottage Grove; W. A. Feight, Parke City; E. W. Phares, Tipton; E. E. Elliott, Muncie; P. E. Goodrich, Winchester; A. Boling, Adams; O. C. Gorden, Summitville; A. M. Wellington, Anderson; B. F. Richey, Paris; H. H. Hagenback, Sulphur Springs; C. W. Hinkle, Rushville; J. W. Waltz, New Palestine; G. G. Davis, Tipton; J. T. Higgins, Barnard; L. S. Conarroe, Colfax; C. B. Jenkins, Noblesville; D. B. Clark, Hagerstown; D. E. Moore, Waynestown; T. B. Wilkinson, Knightstown; H. L. Holly, Atlanta; T. P. Riddle, Fort Wayne; R. Porter, Cicero; William Simmons, Kentland; J. C. Chambers, Wheatland;

Elmer Martin, Wolcott; F. B. Fox, Tipton; L. Kelly, Talbot; J. C. Jordan, Kempton; R. M. Blankenship, Paragon; A. W. Taylor, R. T. Messinger, LaPorte; E. M. Wosmuth, Roanoke; D. Lesh, Markle; W. M. Patterson, Morristown; Martin Moore, Fountain-town; Geo. W. Moore, Letts; J. J. Snodgrass, Hillisburg; J. S. Huffer, Yorktown; H. A. Gaddi, Modoc; Baxter McBane, Thornton; G. W. Drake, Sheridan; G. O. Stauffer, Napponee; Robert Hutchinson, Arlington; R. M. Noding, Flat Rock; T. J. Ryan, Delphi; J. R. Stafford, Connersville; I. M. Phillips, New Waverly; Bennett Taylor, LaFayette; John A. Rice, Frankfort; A. B. Cohee, Frankfort; A. E. Waltz, New Palestine; A. M. House, Hobbs; F. P. McComas, Rossville; Wm. Rider, Waynestown.

INSPECTOR AT CLEVELAND.

The grain inspection department has in times past graduated some fine men who have achieved distinction in their special line of usefulness; and the department seems still to continue the habit; for to Buffalo the Cleveland Chamber of Commerce went recently to find a new deputy inspector for that market, choosing Arthur G. Roesser, who has been associated with the Buffalo Corn Exchange for



ARTHUR G. ROESSER.

the past six years as inspector in charge of the Lake Shore yards.

On the eve of leaving Buffalo to go to the Cleveland Chamber of Commerce, Mr. Roesser's associates in the inspection department of the Buffalo Corn Exchange gave him a surprise party and during the function presented him with a handsome case of silver in appreciation of his six years' service in Buffalo.

Mr. Roesser received his early training in the grading of grain under the guidance of Mr. John D. Shannahan and Mr. Alfred Anderson, both well known experts. Mr. Roesser will be pleased to see any of his friends who may visit Cleveland.

DOCKAGE AGAIN.

H. O. Brown, North Dakota representative on the Minnesota Board of Grain Appeals, has again called the Dakota farmers' attention to the fact that they are giving away over a million dollars' worth of feed annually, and paying the freight, too. As feed, wheat screenings are worth from \$12 to \$30 a ton; and they are worth as much on the farm as they are at Duluth or Minneapolis. He reminds the farmers that "the value of this product which you have actually given away, would have built a court house or college at a cost of about \$70,000 each, within every county of your state in the last five years.

"We consider the question of dockage a very grave matter to our grain growers and for this reason are writing upon this question at this time, hoping that this article will give you some food for thought along these lines, that in the near future will greatly accrue to your benefit.

"Every elevator in the state should clean every bushel of grain shipped to terminal markets, thereby saving the dockage and also for the fact that dirty grain in a great many cases lowers the grade, one and sometimes two grades. As an illustration of what can be done by the proper handling of a country elevator, will give you a few facts for your earnest consideration.

"We will take for consideration an elevator handling 100 cars of wheat and flax per season. The value of the screenings, where the grain is cleaned and the profit to be gained by the reason of being properly cleaned on better grades, would be about \$3,000. This would pay every item of expense in connection with operating and maintaining the elevator. This article applies to the grain growers of our own great state, and also to our sister states of South Dakota and Minnesota."

THE AGRICULTURAL CENSUS.

The general schedule of the Census of Agriculture for 1909 is in press. It covers both sides of a 12 by 15-inch sheet, and contains questions under 58 numbered heads. The total number of blank spaces for replies is about 575, but of course no one farm will have an answer for all the inquiries. A separate schedule will be filled out by farm operators for each of the six million farms, approximately, in the United States. The list of questions will cover the following topics:

Information concerning the operator of the farm; farm acreage on April 15, 1910; farm values on same date; mixed tenure; farm expenses; mortgage indebtedness on April 15, 1910; land owned but not operated by this farmer; domestic animals on farms on April 15, 1910; domestic animals purchased, sold alive and slaughtered in 1909; dairy products in 1909; fowls over three months old on the farm on April 15, 1910; poultry and eggs produced in 1909; bees and honey; grains and seeds—number of acres, quantity produced and value of products harvested in 1909, and the number of acres planted or to be planted for harvest in 1910, of corn, oats, common winter wheat, common spring wheat, durum or macaroni wheat, emmer or spelt, barley, buckwheat, rye, kaffir corn and milo maize, rough rice, flaxseed, grass seed (acres planted in 1910 excepted), dry edible beans, dry pease, and peanuts; hay and forage—same inquiries as for grain and seeds, for timothy alone, timothy and clover mixed, clover alone, alfalfa, millet and Hungarian grass, other tame or cultivated grasses, wild, salt or prairie grasses, grains cut green (give name), coarse forage (give name); sundry crops; small fruits; fruits and nuts; farm garden; vegetables produced in 1909; crops grown for sugar in 1909; flowers, nursery stock, etc.; land under grass; forest products produced in 1909; sales of specified crops in 1909; fruits produced in 1909; irrigation.

December 22 was one of the biggest grain shipping days in the history of Portland, Me., six steamers having been loaded for export with 969,700 bushels of wheat and 18,872 bushels of oats.

New Orleans in November, 1909, exported 887,897:50 bus. of wheat and 807,318:42 bus. of corn, being a loss of 312,516:50 bus. of wheat and a gain of 174,804:06 bus. of corn compared with November, 1908.

In the published notice as required by law, the owners of the regular warehouses in Chicago have given notice that from and after July 1st, '10, the rate for the storage on grain will be 1c per bu. for the first ten days and one-thirtieth of one cent for each day thereafter; special higher rates, as usual, for grain that is not in good merchantable condition. The present rate and up to July first is ¾c for the first ten days and one-fortieth cent for each day thereafter. The methods of marketing adopted by producers in recent years and the evolution in the trade in distributing markets have contributed to make the business of the public warehouseman unprofitable. In a large measure, the methods of the warehousemen themselves have made the public warehouse an unpopular, although still necessary fixture in the trade.—Pope & Eckhardt Co.

THAT CHINESE CORN.

In the December number of this paper (p. 317) was a preliminary notice sent out to the press by the Bureau of Plant Industry calling attention to a new kind of corn (maize), a variety which having come to this country from China has been called Chinese Corn. The Bureau has since issued a Bulletin (No. 161) giving particulars of the experiment station work with the seed during 1908, with a description of the variety and an enumeration of its peculiarities, several of which are unique and combine to enable the plant to resist the drying out of the silks by dry, hot winds at the time of flowering. While the variety is distinguished by plants and ears so small that it can hardly hope to compete with our established varieties, yet in the semi-arid parts of the Southwest the danger of crop failure caused by drying of the silks before pollination would be reduced if our common varieties had some of the habits of this Chinese Corn; and the Bureau is now endeavoring, by hybridizing, to combine the desirable characteristics of this variety with those of the larger and more productive types. Another unique feature of this Chinese Corn is the character of the endosperm, which is quite distinct from the starchy, or sweet, endosperms of our common varieties of corn,—a fact that may have some economic value.

Planted near Washington, on May 9, 1908, 53 plants were grown to maturity; first pollen shed, 82 days from planting; seed harvested in 139 days, when most of the seed had been mature for some time. As a rule silks appeared about the time the last of the pollen was being shed; suckers were produced by 40 per cent of the plants. The Bulletin continues in description of prominent characteristics of the plant:

The plants were of small stature, ranging from $3\frac{1}{2}$ to 6 feet in height; the average circumference of the stalk at the smallest point of the largest internode was slightly less than 3 inches. The number of nodes above the ground ranged from 11 to 15, with 4 nodes above the ear. The average number of green leaves at the time of tasseling was 12. The blade of the fifth leaf from the top averaged $31\frac{1}{2}$ inches long by $3\frac{1}{2}$ inches wide. The longest leaf sheath averaged $7\frac{1}{2}$ inches. The plants produced from 1 to 3 ears, a single ear at a node in every case. The ears were small and slightly tapering, averaging $5\frac{1}{2}$ inches long by $4\frac{1}{3}$ inches in greatest circumference, with 16 to 18 rows of small grains. Nothing unusual in the size or distribution of the roots could be observed.

Except for their short, stocky habit of growth, the plants showed no unusual behavior until after the leaves of the last four or five nodes began to appear. These leaves were formed in rapid succession, with very short internodes, and it was then noticed that on a large proportion of the plants the blades of the leaves were all on one side of the main stem. Thus the upper part of the plant, instead of having the usual distichous or two-rowed arrangement of the leaf blades, might be described as having a one-rowed, or monostichous, arrangement. While in only about 25 per cent of the plants were the upper leaf blades completely monostichous, all of them showed a tendency in this direction. This one-ranked appearance is brought about by a twisting of the leaf sheaths, the actual insertion of the leaves being opposite, as in all grasses.

In addition to the unusual position of the leaves, the blades of the upper nodes were erect instead of spreading or drooping, as in other varieties. The midrib of the blades did not form an angle with the sheathing base of the leaf, but continued upward in a straight line. The internodes on the upper part of the plant were also much shortened, so that the tassel was not carried up, as in other varieties, but was considerably exceeded by the tips of the leaves.

The tassel was moderately compact, with from 14 to 30 primary branches, many of which were again branched. The spikelets were arranged in alternate groups of two, after the manner of most of our cultivated varieties. Nothing unusual was observed in the flowers. Pollen was produced in great abundance, and over a period of about five days in individual plants.

DISTINCTIVE CHARACTERISTICS.

The following are the characters which distinguish this Chinese corn from our United States varieties as well as from any of the forms thus far observed in Tropical America. It should not be overlooked that the plants on which these observations were made were grown in an entirely new environment and that some of the characters exhibited may not be normal to the variety. Should this prove to be the case, however, these unique

characters still show the possibilities of the species and are scarcely less interesting in the new connection.

Erect Leaf Blades.—The leaf blades of the upper nodes are in most cases erect, the midrib of the blade and the back of the leaf sheath forming a straight line. The leaves on the lower part of the plant are borne at the customary angle, but each succeeding leaf is slightly more erect than the preceding until they become completely erect on the last two or three nodes. Our common varieties exactly reverse this behavior, the blades that are somewhat erect being on the lower part of the plant, each succeeding blade being more nearly horizontal.

Our cultivated varieties vary greatly with respect to the angle of the blades, but nothing has been observed that approaches the definitely erect position of the blades in the Chinese variety. What at first

upright leaves was also abnormal in other respects. In observing the range of this character the other extreme was found in drought-resistant varieties from the table-land of Mexico, which have the uppermost leaf blades bent away from the stalk at an angle of over 90 degrees, or below the horizontal.

Monostichous Arrangement of Leaf Blades.—The most striking peculiarity of this Chinese variety is the one-sided appearance of most of the plants, caused by having the leaf blades on the upper part of the plant all on one side of the stalk. This character is shown in plate I, figures 1 and 2, which represent opposite sides of the same plant, and in plate II, figure 2, a more detailed view of the upper part of a plant, showing the bases of the blades in their natural size and position.

This monostichous habit is definitely correlated with the erect position of the blades and follows almost as a necessary consequence. If the erect



Plate I. (Frontispiece.) Chinese maize: Front and back view of the same plant. It will be noted that the leaf blades on the upper part of the plant are all on one side of the stalk and that they are erect and exceed the tassel.

appeared to be an approximation was seen in a type of corn from Colombia. A considerable series of varieties from different parts of that country, while not in the least resembling the Chinese corn in other particulars, had very erect leaf blades. The resemblance is, however, more apparent than real. The blades that are erect in the Colombian varieties are not those that immediately precede the tassel, but are several nodes lower down. Few of the Colombian varieties mature in the United States, and the uppermost leaves that are produced, though perhaps 20 feet from the ground, are still several nodes from the tassel. If the Colombian plants should reach maturity the blades that correspond to the erect blades of the Chinese variety would probably be borne much more nearly horizontal.

A much closer approximation to the erect blades of the Chinese variety was found in a single plant of a variety of dent corn secured from Brownsville, Tex. In this specimen the uppermost blade made an angle with the sheath of only 5 degrees, although other plants of the same variety had the leaf blades borne at the customary angle. The plant with the

blades were arranged in the ordinary manner they would almost entirely inclose the silks and very greatly reduce the chances of pollination. The erect position of the blades, in connection with the monostichous habit, constitutes an almost ideal arrangement for insuring pollination. In the most extreme case the leaves of the fifth or sixth node from the base of the plant begin to show a deviation from the normal alternate arrangement, but in most cases only the last four or five leaves are distinctly on one side.

With the exception of the single abnormal plant in the Brownsville variety already mentioned, little tendency toward this monostichous habit was observed in any other variety, and the character seems never to have been recorded.

As a consequence of the monostichous habit the top of the plant is curved or scorpoid. The crowding of the leaf blades on one side of the plant necessarily displaces the top, so that it curves toward the open side of the plant. In the most pronounced cases the tip of the plant is curved to such an extent that the last leaves pass the perpendicular and bend

forward over the tassel, with the back of the leaf uppermost.

Development of Silks by Ears while still Inclosed in the Leaf Sheaths.—A third character associated with the erect blades and monostichous habit is the production of the silks directly at the junction of the leaf blade and sheath. This character, while by no means so rare as the two preceding, does not appear, so far as the writer knows, in any of the varieties of field corn now cultivated in the United States. It is brought about by the development of the silks at an early stage, before the ear stalk has elongated and while the young ear is very small. The silks appear at the base of the leaf, where it joins the sheath before there is any other indication of an ear, except a slight swelling of the leaf sheath.

A similar tendency to produce the silks before the young ear emerges from the leaf sheath is also shown by several entirely unrelated types from the American Tropics, but appears to be confined to varieties from regions that are subjected to severe drought.

Waxy Endosperm.—The most distinctive character possessed by this Chinese variety is the nature of the endosperm, which is entirely unlike that of any of the varieties of corn.

The immediate effect of this peculiar structure of the plant is one of those developments, through evolutionary process of nature, that so often startle the observer with the beautiful adaptation of life to environment. The combination of erect leaf blades, their monostichous arrangement, and the silks born directly in the angle where the blade forms the sheath, constitutes a wonderful adaptation to prevent the drying out of the silks before pollination and at the same time the overlapping blades catch all the pollen blown against the upper part of the plant and allow it to settle in the channels at the base of the blades where it accumulates, until the receptive silks are pushed into it and can then become fertilized before they are even exposed to the air. Those familiar with the ordinary varieties of corn will readily appreciate the difference in habit and the resulting effect, especially in the Southwest where the hot winds for quite natural reasons ruin or mar so many promising crops. Of course, adds the Bulletin—

This combination of characters, while constituting an effective adaptation against drought at the time of flowering, might have its disadvantages if moist conditions prevailed. The accumulation of pollen in the axils of the blades if kept moist would form an excellent medium for the development of molds, bacteria and fungi.

As the upright blades of the leaves always extend above the tassels it seems that the chances of self-pollination must be greater than usual, especially since in this Chinese variety the tassels do not appear much before the silks. The production of more than one ear on each stalk, which is usual in this variety, would to some extent correct the tendency to self-pollination, for in practically all cases the second ear must be cross-pollinated. In regions where high winds prevail at the time of flowering, the percentage of self-fertilized grains would be further reduced.

This adaptation would be still more perfect if the plants were oriented so that the open side of the plant was presented to a prevailing wind. In our experimental planting the plants appeared to face indifferently in all directions, but the number of plants was small and if any tendency toward a definite orientation existed the wind would doubtless be the exciting cause, while in the absence of a definitely prevailing wind such orientation could hardly be expected.

The seed in question did not indeed come from a droughty part of China (Shanghai), but may have originated in northern China where droughts are the rule in the summer months; and at any rate the plant does protect its fruit against dry winds at the critical period.

The Bulletin then gives the following description of the grain itself.

Color.—The original seed was very much mixed with respect to color. A majority of the grains had a yellow endosperm and a dull ruby-colored aleurone layer. Few were pure white and a still smaller number a very light lemon-yellow.

The color of the aleurone layer was distinct from anything that has been observed in other varieties. It varied greatly in intensity. In rare cases it approached the bluish black of our common "black" varieties, but for the most part varied from a dull ruby to maroon. The color was usually confined to the top of the seed, fading out toward the base and sometimes slightly mottled. The pericarp was in all cases transparent.

The location of a red color in the aleurone layer

is in itself a rather unusual character. As a rule in red varieties the color is located in the pericarp or outside coat of the seed. The aleurone, or the layer of cells immediately inside the seed coat, if colored, is usually some shade of blue, which may vary from slate color through purple to black. There is one well-known exception, the Voorhees red sweet corn, which has a dark-red aleurone. It is interesting to note that this variety originated by crossing a white variety (colorless aleurone layer) and one which had a blue-black aleurone.

Size and Shape of Kernels.—Most of the seeds are cuneate with rounded tops, straight sides, and pointed bases, though there were many broader seeds with blunt bases. The cross-section is circular or indistinctly hexagonal, the transverse diameter being only slightly greater than the longitudinal. In the form and size of the kernels, as well as in the appearance of the ear, this corn is very similar

of the corneous or horny endosperm of our ordinary varieties is quite distinct in its appearance and mechanical characteristics, and must be considered as constituting another type of endosperm in addition to the amylaceous or starchy and the corneous or horny endosperm possessed by flint, dent, and soft varieties.

This new type of endosperm is undoubtedly more closely related to the corneous endosperm and occupies the same position in the grain, but its physical properties are strikingly different. It is less glassy than the corneous endosperm, though nearly as hard. Cut in any direction, it separates with a sort of cleavage, exposing a dull, smooth surface. Instead of being translucent, it is completely opaque, though not in the least approaching the coarse opaque texture of the amylaceous endosperm. The texture suggests that of the hardest waxes, though it is still harder and more crystalline. From this

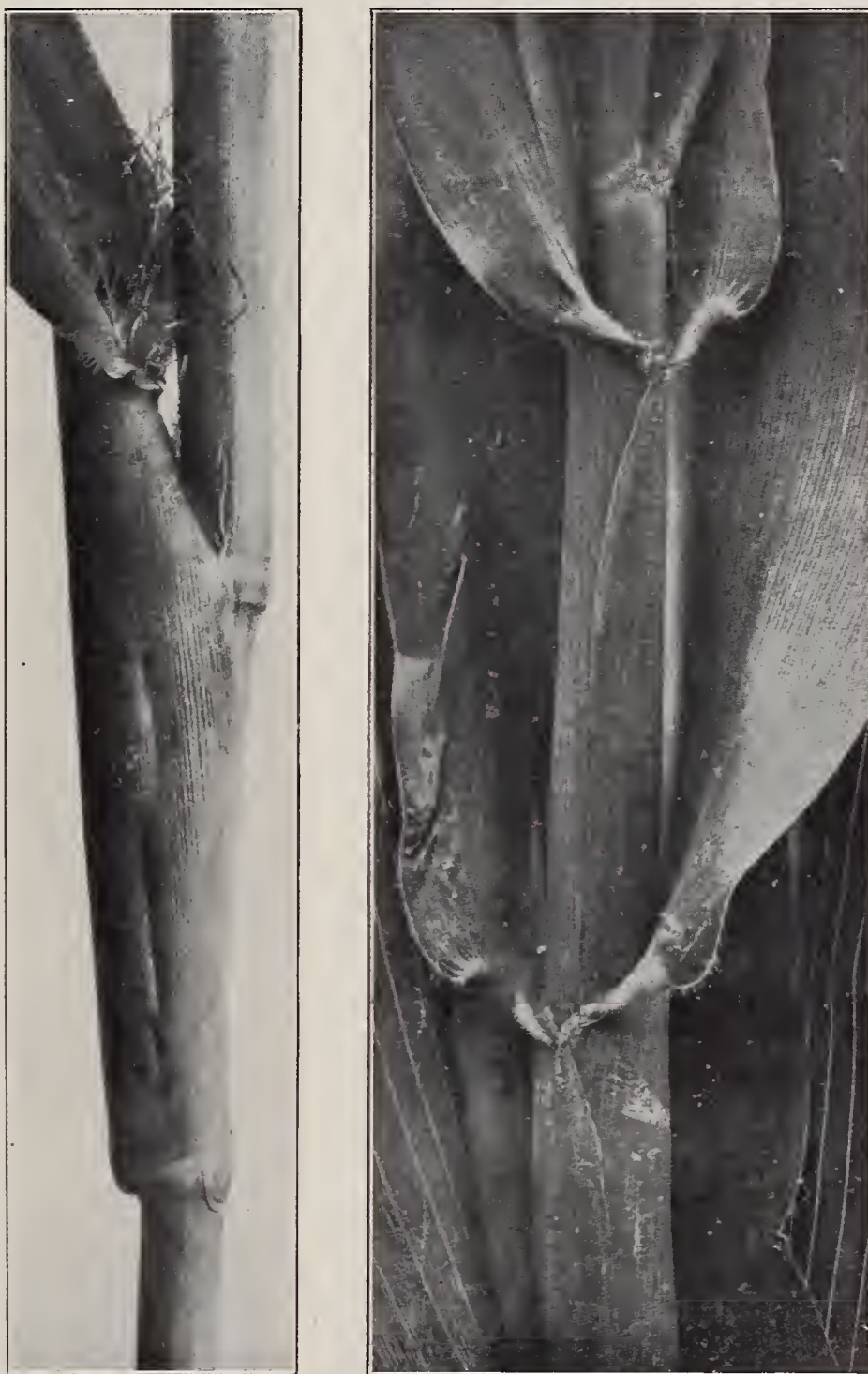


Plate II. Fig. 1.—Chinese maize, showing silks protected by the base of the leaf blade. The photograph here reproduced was taken some time after pollination and the enlargement of the ear has forced the sheath away from the stalk. Fig. 2.—Upper part of a Chinese maize plant, showing the monostichous arrangement of the leaf blades. The base of the tassel appears in the upper part of the picture.

to a type commonly grown in southern and south-eastern Europe.*

In the original seed the size was very variable, due largely to the presence of poorly formed grains. The white seeds were somewhat more uniform and slightly larger than those with red aleurone. The red seeds averaged 7 mm. long and 5.8 mm. in greatest width (50 seeds measured), while the same number of white seeds averaged 7.4 mm. long and 6.1 mm. wide. The average weight of the red seeds was 0.098 and of the white 0.122 gram.

New Type of Endosperm (Waxy Endosperm).—The texture of the endosperm is one of the unique features of this corn. There is a very small amount of the amylaceous, or starchy, endosperm, about as it appears in the common varieties of pop corn. The remainder of the endosperm occupying the position

optical resemblance to wax the term cereous or waxy endosperm is suggested. Like the corneous endosperm, it is either white or yellow, while the amylaceous endosperm, so far as observed, is always white. The opaque nature of this cereous endosperm is especially evident when grains with a colored aleurone layer are cut. When colored grains with a corneous endosperm are cut the translucent nature of the endosperm causes it to appear colored like the aleurone layer, while in the Chinese corn the endosperm appears in its true color, white or yellow, unaffected by the color of the aleurone.

Composition of Seed.—The appearance and physical composition of the seeds of this Chinese corn were so distinct from that of other varieties that the possibility of a difference in chemical composition naturally suggested itself, but analyses did not yield any very unusual results. Analyses of two ears, apparently similar, showed very different percentages of oil and protein, but all within the limits reported from analyses of American varieties.

*Mr. J. D. Shanahan, of the Bureau of Plant Industry, states that these varieties with small grains command a special price in England, where they are in demand as a food for pheasants.

The chemical composition of the seeds of corn stands in no direct relation to the type of grain. Similar varieties are widely separated with respect to amount of protein and oil, and such diverse types as the soft corns and the pop corns may show a closely similar chemical composition. Thus one variety of soft corn [among 21 whose composition is given in a table omitted from this abstract] stands next to the top in percentage of protein and a similar variety is fourth from the last. One variety that must be classed as a pop corn heads the list, with 13.31 per cent of protein, while another variety of pop corn from Mexico is third from the last, with 8.35 per cent. It is further interesting to note that the variety of soft corn grown by the Hopi Indians stands first in percentage of oil, second in percentage of protein, and third in amount of water.

It has frequently been noted that the composition of different ears of a uniform strain shows diversities of the same order as that found in a series of varieties. Even the very distinct types included in the above series show only a slightly greater range than that usually found in a similar number of ears of a single uniform variety.

Crossing the Chinese corn with other varieties seems to have the effect of increasing the percentages both of oil and of protein in the same season that the cross is made. Seed from an open-pollinated ear that had received foreign pollen, as shown by the corneous nature of the endosperm, showed an increase of 1.02 per cent in oil and 0.37 per cent in protein over the pure seed from the same ear.

ELEVATORS AT LEE, ILL.

The elevators shown in the engraving herewith are at Lee, Dekalb County, and are owned by Dickinson & Lewis who purchased them on November



DICKINSON & LEWIS' ELEVATORS, LEE, ILL.

1 last of A. O. Anderson, the deal including the attached lumber yards and coal sheds.

Messrs. Dickinson & Lewis though new to Lee, have been doing business for ten years at Creston in the adjoining county of Ogle where they have operated an elevator as well as lumber yards and coal sheds, and have enjoyed the confidence of the farmers thereabouts, as shown by their splendid trade in all lines.

They expect to do as well at Lee, where O. A. Halsne will be their local manager, Messrs. Lewis and Dickinson dividing their time between the two stations.

Dr. O. C. Willhite, superintendent of the Dunning Asylum (Cook County, Ill.), reports 28 cases of pellagra there during 1909, with 15 deaths. Dr. Willhite is credited with being the first to make a report of the discovery of a case of this disease in Illinois.

The U. S. Agricultural Department will set up an electrical moisture testing apparatus at the T. B. Hord Company's grain elevator at Columbus, Neb. The apparatus will comprise a couple of bins which will be filled with corn, one with a high grade corn with very little moisture, and one with a larger amount of moisture. This corn will be tested every few days, and during the same time a like quantity of the same grades of corn will be tested at one of the seaboard laboratories, either at New York or New Orleans. The tests are for the purpose of ascertaining the best grade of corn for export purposes, and they will continue probably until about May 1 next.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

WILL VISIT THE EASTERN HAY TERMINALS.

Editor American Elevator and Grain Trade:—The board of directors of the National Hay Association have authorized President Robinson and myself to make a tour of the Eastern terminal markets in behalf of this organization, for the purpose of investigating their methods of handling and grading hay. The following is the trip as proposed, which may be changed slightly to conform with railroad time tables:

Columbus, Ohio, January 10.
Pittsburg, Pa., January 12-13.
Baltimore, Md., January 14-15.
Washington, D. C., January 16-17.
Philadelphia, Pa., January 19-20.
New York City, January 21.
Boston, Mass., January 24-25.

We will visit the different exchanges on the days named, and should be pleased to meet any of the members of the Association who live not only in the cities mentioned but in nearby towns.

Wishing one and all a happy New Year, I am,
Yours very truly, J. VINING TAYLOR.
Winchester, Ind. Secretary-Treasurer.

"THE SHIPPER WHO SMILES."

Editor American Elevator and Grain Trade:—"The Shipper Who Smiles," by C. S. Bash, which appeared in your last issue, was not, saying the least, quite farcical; but I admit that when my attention was called to it, I was obliged to laugh myself. But fearing that some of my friends, "hay shippers," might take Mr. Bash's remarks too seriously, I felt it my duty to advise them not to be like John and the Golden Rule, and not to trust to either horse doctor or horse sense in selecting hay for the Cincinnati market. It might go to some of the Southern markets, as Mr. Bash asserts, and if Cincinnati is placing No. 2 Timothy in the South for No. 1, it is done so upon the shipper's own responsibility, and is not inspected by this department. Any shipper can, if he so desires, take the same chances; but if the inspector at the terminal market is called upon to inspect it, and his judgment is different, the shipper should not go up in the air and condemn everybody in the market.

We all know that the hay business at its best this season is a tough proposition. Hay buyers have become so numerous in most of the localities, who possess but little knowledge of the grades and values, that it is impossible for the real hay man to meet the competition and figure a safe profit. It is also a general practice to make all the doors look as good as possible and to show it up to the very best advantage, which often proves very deceptive; for when the hay is unloaded and a thorough inspection is made, conditions exist that will reduce its grade. I do not believe that any up-to-date dealer would accept any door inspection as final. Door inspections are of little value and can seldom be relied upon for correctness, for two reasons especially:

First—The loader gets his instructions to make the doors look well.

Second—The inspector at the terminal market is obliged to fix a grade upon same, when only a very small proportion of the bales can be seen; and at time of arrival in the railroad yards, he is obliged to form his opinion while working between a line of cars, which does not afford proper light or sufficient room for observation. Under these circumstances, no man can justly criticize a reversal of the grade found at doors after every bale is removed and each bale carefully examined.

For the benefit of the argument, Cincinnati pays more than her competitive markets for the different grades of hay under the National Hay Association grading, and expects to receive in return just what a fair interpretation of the rules calls for. Every bale of hay that a car may contain is carefully inspected when it is unloaded and the grade fixed and defects noted when an official inspector is or-

dered to inspect it. Therefore, it is almost impossible to pass without noticing any condition that the grades do not warrant. There are lots of shippers that are very unreliable and have become prejudiced against the inspectors of terminal markets, while if personal investigation was made by practical men in the business such prejudice would be stamped as unwarranted. All of the shippers I have had the pleasure of meeting in the past two years, and who in most all cases give this branch of the work their personal attention, have profited by their visits to this market and have expressed themselves satisfied with the grades they are receiving.

To support this fact, I desire to state that Mr. H. B. McClure of the Agricultural Department advised me that in all of his tour of investigation he found Cincinnati to have in his judgment the best system. This is indeed very gratifying, inasmuch as it comes from a man who has been making the hay business a study for the past five years and who has traveled extensively in search of information that may be gathered to help the business.

The fact is that the hay business has narrowed down to a very close margin, and there are few, if any, that are making any money this year on account of poor qualities, high values and lots of unreliable competition. The buyers in the country find it extremely hard to do business with the farmer, for his opinions as a rule are not in accordance with established customs, either in grade or value, and in most all cases buyers are obliged to buy his hay according to his ideas and upon the strength of being overbid and the other fellow getting it. This places the full responsibility upon you. The average farmer will claim his hay is all No. 1, and if you are able to convince him, which is seldom the case, that it is not, it then must be No. 2 because he raised it and his stock eats it and the other fellow has offered him a dollar more.

These are a few of the arguments one meets when he approaches Mr. Farmer to buy his hay, and if you are not very careful after seeing it in his barn, under a poor light and to a disadvantage, you will find, after it is baled and loaded, that you have been "stung" again.

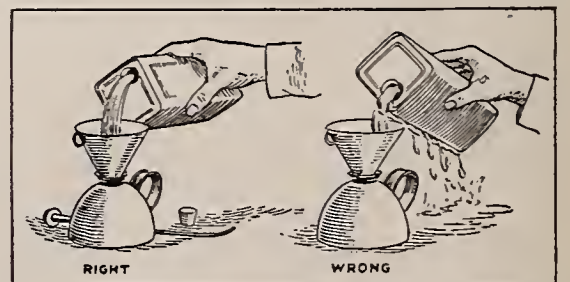
These are facts and most of the hay buyers will admit them. The success of your business depends upon seeing it right and buying it right; if either of these essentials is neglected, you have suffered a loss before the hay leaves your hands, which can not be made satisfactory by your commission merchant at the other end; for the best he can do is to sell it according to grade at the market value. So be careful; and you should, before condemning this or any other market, make a personal investigation and see for yourself whether or not you or the other were right or wrong.

I will be pleased to meet any of the hay shippers at any time, and show them our ideas, as well as our methods, of inspecting hay in Cincinnati.

Respectfully yours, E. F. DENNIS,
Chief Hay Inspector, Cincinnati Chamber of Commerce.

POURING OIL FROM A SQUARE CAN.

The accompanying illustration, for which we are indebted to Popular Mechanics, is self-explanatory. When oil is contained in a square can, with the



opening at the side or corner, such a can may be poured without the loss of a drop if it is held with the opening at the top. It can then be tipped so that the oil will flow without a gurgle.

Philadelphia's wheat exports for the crop of 1909 are expected to break all the port's records.

ASSOCIATIONS

There is talk of organizing a broom corn growers' association at Liberal, Kan.

The 1910 annual meeting of the National Hay Association will be held at Cedar Point, Ohio, on August 23, 24, 25.

Sec'y Strong reports the following new members of the Illinois Grain Dealers' Association: Alder Grain Co., Indianapolis, Lafayette and Buffalo; Russell & Butler, Meridian, Miss.; Stebbins-Witt Grain Co., Indianapolis.

Sec'y-Treas. J. Vining Taylor reports that the following gentlemen have been appointed delegates of the National Hay Association to attend the conference on uniform state legislation, called by The National Civic Federation, to meet in Washington, on January 17, 18 and 19: Charles J. Austin, New York; Charles England, Baltimore; H. G. Morgan, Pittsburg; John B. Daish, Washington; H. W. Robinson, Greenspring, Ohio; S. T. Beveridge, Richmond, Va.; and J. Vining Taylor, Winchester, Ind.

RAILWAY RELATIONS.

Sec'y Strong of the Illinois Association, in Letter No. 20, among other things says:

"In view of the present shortage of cars, shippers should use their best efforts in every way to assist the railroads, by ordering only the exact number of cars which they need for immediate use.

"Shippers are advised also to order cars in writing, keeping a duplicate of the order, to the end that they may have this evidence as a basis for making claim in case of damage or loss on account of grain getting out of condition, or the market price becoming lower. It is feared that the railroads will first care for through or competitive business, and allow local business to wait. It will be well to protest to the agent at your station against such methods.

"A meeting of a committee from the Freight Claim Agents' Association and a committee from the Illinois Grain Dealers' Association, was held on December 15 in Chicago, and a tentative arrangement was made which will be more fully reported as soon as the matters therewith can be worked out; but the members will find that their claims will be collected very much sooner by filing them through the Claims Department. Write me if you desire information in reference to any claims which you wish to have collected."

KANSAS ASSOCIATION ANNUAL MEETING.

The thirteenth annual meeting of the Kansas Grain Dealers' Association will be held in Kansas City, Mo., on February 8, 9 and 10, with headquarters at the Coates Hotel. The sessions, five in number, will be held in the banquet hall of the Hotel. The first session will be held at 2 p. m. on the 8th, and the other sessions will be held morning and afternoon of the 9th and 10th. There will be no night sessions. Inasmuch as the Association now has the largest membership in the history of the organization, there should be the largest attendance ever had at its meetings.

P. S. Goodman of Chicago will address the convention on the subject, "Some Theories of the High Price of Grain." J. S. Tustin, F. C. A. of the M. P. Ry. Co., will speak on the subject, "Railroads and Public Sentiment." H. A. Foss of Chicago will speak on the subject, "Scales and Car Equipment." It is hoped also to have Mr. Scott W. Cowen, Chief Grain Inspector of Illinois, make an address on the subject, "Office instead of Track Inspection." The printed program should reach members by January 25.

The secretary would be glad if every member who has in mind any subject that he would like to have discussed at this meeting would make a note of it and send it to him at once.

APROPOS FREIGHT CLAIMS.

On December 15, in the rooms of the Central Freight Association, Rookery Building, Chicago, a meeting was held of the committee from the National Association of Freight Claim Agents, consisting of Mr. Kirkland, Chairman Freight Claim Association Illinois Central R. R.; Mr. Stevens, Freight Claim Association C. & E. I. R. R.; Mr. Bunger, Freight Claim Agent C. R. I. & P. R. R.; Mr. Richards, Freight Claim Agent C. & N. W. R. R.; representing the Freight Claims' Association, and Geo. D. Montelius, Piper City, president; Wm. R. Bach, attorney, Bloomington, manager of the Claims Department; R. C. Baldwin, Bloomington, chairman of the railroads committee; Mr. S. W. Strong, secretary, representing the Illinois Grain Dealers' Association.

These committees met for the discussion of claims, and they took up such topics as natural shrinkage, deduction for variation of scales, grain doors, repair of cars, how claims for loss of grain in transit or from delayed delivery should be substantiated, and had a three-hour discussion of all the

questions arising between shippers and carriers, in a most frank and amicable manner. The committees were appointed last June; one by the National Association of Freight Claim Agents, at their meeting at Old Point Comfort, Va.; and the other at the 16th Annual Convention of the Illinois Grain Dealers' Association, held at Peoria. No doubt much good will come of this meeting not immediately apparent.

TEXAS ASSOCIATION ITEMS.

Sec'y G. J. Gibbs, in a circular letter to the members of the Texas Association, among other things says:

"Since my last report, Mr. W. D. Van Wagene of Houston, Texas, a member of our Association, has died.

"The Northern Inspection Rules now permit a greater percentage of moisture allowances in corn, and after January 1, 1910, 16 per cent of moisture will be allowed in No. 2 corn, 19 per cent in No. 3 and 22 per cent in No. 4. Watch out for damp and damaged corn. It is a well known fact that corn with the above percentages of moisture will not keep in our climate. I advise that our members be careful in buying corn out of Chicago, and other northern markets. Do not buy unless it is guaranteed dry and to arrive at destination in good condition."

A number of arbitration decisions accompanied the letter, which will be found among the court proceedings in this issue.

COMMITTEE OF THE NATIONAL ASSOCIATION.

Sec'y Courcier of the Grain Dealers' National Association has published the following appointments by President Tyng of standing committees for the year 1909-10:

Executive Committee.—J. W. McCord, Chairman, Columbus, Ohio; Arthur R. Sawers, Chicago, Ill.; T. A. Morrisson, Kokomo, Ind.; A. C. Tyng, Peoria, Ill.; John F. Courcier, Toledo, Ohio.

Committee on Arbitration.—C. C. Mills, Chairman, Peoria, Ill.; E. M. Wasmuth, Roanoke, Ind.; E. A. Grubbs, Greenville, Ohio.

Committee on Trade Rules.—John J. Stream, Chairman, Chicago, Ill.; Alvin H. Poehler, Minneapolis, Minn.; H. Lee Early, Cincinnati, Ohio; J. A. A. Geidel, Pittsburg, Pa.; H. E. Halliday, Cairo, Ill.

Committee on Membership.—Geo. F. Powell, Chairman, St. Louis, Mo.; H. M. Stratton, Milwaukee, Wis.; Dan Joseph, Columbus, Ga.; J. E. Rahm, Kansas City, Mo.; Chas. Rockwell, Mt. Vernon, N. Y.

Hay and Grain Joint Committee.—J. W. McCord, Chairman, Columbus, Ohio; A. R. Sawers, Chicago, Ill.; T. A. Morrisson, Kokomo, Ind.

Committee on Legislation.—A. E. Reynolds, Chairman, Crawfordsville, Indiana; L. W. Forbell, New York, N. Y.; H. S. Grimes, Portsmouth, Ohio; J. C. F. Merrill, Chicago, Ill.; C. A. Magnuson, Minneapolis, Minn.

Committee on Transportation.—Alfred Brandeis, Chairman, Louisville, Ky.; C. F. Beardsley, St. Louis, Mo.; H. E. Kinney, Indianapolis, Ind.; E. M. Wayne, Delavan, Ill.; Wm. M. Richardson, Philadelphia, Pa.

Committee on Bill of Lading.—Charles England, Chairman, Baltimore, Md.; Jas. W. Sale, Bluffton, Ind.; G. F. Ewe, Minneapolis, Minn.; Henry L. Goeman, Toledo, Ohio; E. Wilkinson, Birmingham, Ala.

Committee on Demurrage.—E. W. Seeds, Chairman, Columbus, Ohio; C. S. Bash, Fort Wayne, Ind.; Geo. D. Montelius, Piper City, Ill.

Committee on Natural Shrinkage.—W. M. Bell, Chairman, Milwaukee, Wis.; Nathan Merriam, Omaha, Neb.; James H. Bowne, New York, N. Y.

Committee on Publication Arbitration Decisions.—H. S. Grimes, Chairman, Portsmouth, Ohio; C. C. Miles, Peoria, Ill.; E. M. Wasmuth, Roanoke, Ind.; Warren T. McCray, Kentland, Ind.; Adolph Gerstenberg, Chicago, Ill.

Committee on Telephone and Telegraph Service.—Edward Beatty, Chairman, New York, N. Y.; Harry W. Kress, Piqua, Ohio; Harry H. Bingham, Louisville, Ky.; P. E. Goodrich, Winchester, Ind.; H. A. Hillmer, Freeport, Ill.

Committee on Crop Reports.—Fred Mayer, Chairman, Toledo, Ohio; B. A. Lockwood, Des Moines, Ia.; Buran House, Oklahoma City, Okla.; T. W. Swift, Battle Creek, Mich.; Bert Boyd, Indianapolis, Ind.; A. B. Beverstock, Lexington, Ohio; S. W. Strong, Pontiac, Ill.; E. H. Young, Evansville, Ind.; W. C. Goffe, Kansas City, Mo.; Mark Shultis, Boston, Mass.; C. E. Lewis, Minneapolis, Minn.

Committee on Uniform Grades.—Wm. N. Eckhardt, Chairman, Chicago, Ill.; John M. Dennis, Baltimore, Md.; James F. Parker, New York, N. Y.; J. S. McClellan, St. Louis, Mo.; C. A. Brown, Minneapolis, Minn.; J. Sidney Smith, Kansas City, Mo.; A. K. Taylor, Milwaukee, Wis.; E. P. Peck, Omaha, Neb.; E. Wilkinson, Birmingham, Ala.; A. C. Gale, Cincinnati, Ohio; E. L. Rogers, Philadelphia, Pa.; A. F. Leonhardt, New Orleans, La.; S. Tate Pease, Memphis, Tenn.; M. Purcell, Buffalo, N. Y.; E. H. Culver, President, Chief Inspectors' National Association, Toledo, Ohio.

NEW MEMBERS.

The following new "direct" members of the Association are announced:

Baltimore—James J. Comer & Co.

Boston—Mathew D. Benzaquin, S. E. Faithful and W. D. Fulton.

Buffalo—Alder & Stofer, The Churchill Grain & Seed Co., Pratt & Co., Seymour Grain Co. and The Townsend-Ward Co.

Clarksburg, W. Va.—Edward C. Bassel.

Forth Worth, Tex.—E. R. & D. C. Kolp.

Mercer, Mo.—Alley Grain Co.

Minneapolis, Minn.—The Northwestern Elevator Co.

New York, N. Y.—Brainard Commission Co., Clearman & Stenson, Gibbs & Robinson, M. B. Jones & Co., Knight & McDougal, Parker & Graff, Power, Son & Co. and B. F. Schwartz.

Oklahoma City, Okla.—Oklahoma City Mill & Elevator Co.

Philadelphia, Pa.—S. J. Clevenger, E. K. Lemont & Son, J. B. Pultz & Co. and George M. Warner.

Associate Member—Lunham & Moore, New York, N. Y.

OTHER NOTICES.

Sec'y Courcier further announces in circulars dated December 15 and January 5:

"The U. S. Department of Agriculture has very kindly supplied us with a hundred copies each of the following documents: 'Circular No. 40—A simple method for detecting sulphured barley and oats.' 'Circular No. 43—The deterioration of corn in storage.' Requisitions for these circulars will be filled until the supply has been exhausted.

"The proposition to institute uniformity in the grading of grain has been greatly advanced since the Indianapolis Convention, by the following adoptions: Railroad and Warehouse Commissioners of the State of Illinois, Railroad and Warehouse Commissioners of the State of Missouri. To those who have not read the reports of these adoptions in the trade papers, I shall be glad to furnish special reports upon application."

Having adjusted their dues account, Steele & Brown Company of Charleston, W. Va., have been reinstated to the full rights and privileges of membership.

The Waldron Grain Company of Kansas City, Mo., has gone out of business.

The Norfolk Board of Trade has adopted the Uniform Grades, excepting those relating to corn.

Under date of the 3d inst., we transmitted to the secretaries of the several grain exchanges a copy of a resolution adopted at the Indianapolis convention, requesting the changing of the hour for closing the trading session from 1:15 p. m. to 1 p. m., central time. Members can assist in securing prompt action on this proposition by addressing exchange officials in authority, either in person or by correspondence, expressing approval.

PELLAGRA IN THE HORSE.

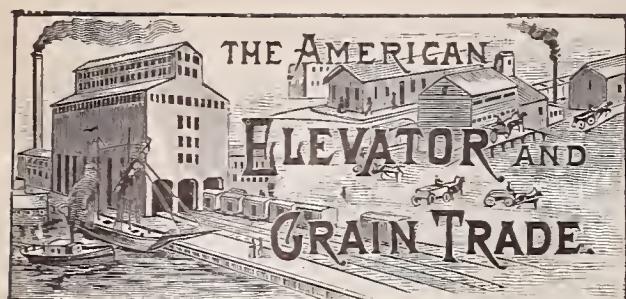
In the rather sensational article by Marion H. Carter on pellagra in the November "McClure's Magazine," an attempt was made to identify "blind staggers" in the horses with pellagra; the "corn stalk" disease in cattle also was treated as suspiciously like pellagra, if not indeed that disease itself. "On the other side," says Dr. Geo. H. Glover, veterinarian, of the Colorado Agricultural College, "we must note this:

"The 'blind staggers' of the horse from eating corn is in no way different from that produced from any other food, save in its frequency and severity of attack. The symptoms are not those characteristic of toxemia and certainly have no resemblance to the symptoms described as being peculiar to the nervous type of pellagra. It is difficult to see how this condition of the horse can be considered in any other light than a flatulent colic with more or less reflex brain disturbance. Pellagra is essentially a chronic condition, while blind staggers is always acute; and if death does not take place within two or three days, the animal goes on to complete recovery. This condition of the horse is not always associated with the feeding of corn that has been heated or handled in such a way as to make the presence of toxic substances probable. It certainly requires an extreme and unwarranted stretch of the imagination to see any relation of blind staggers to pellagra.

"There is a condition of poisoning from eating mouldy corn stalks that in the horse is just a little more worthy of consideration in this connection. But even here there is never a chronic condition following with special skin, intestinal, or nervous symptoms.

"We are unable to discover at this time upon what grounds the author of the article in 'McClure's Magazine,' assumed that the horse is subject to pellagra."

New Orleans in December, 1909, exported 184,309:10 bushels of wheat and 1,427,599:16 bu. of corn. This compared with December, 1908, is a decrease of 38,082:10 bus. of wheat and an increase of 854,414:36 bus. of corn.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, JANUARY 15, 1910.

Official Paper of the Grain Dealers' National Association
and of the Illinois Grain Dealers' Association.

COMMERCE COURT.

The administration project of a "commerce court" has not been enthusiastically received by shippers. Most business men who have had experience in the courts are inclined to think the more of them we have the worse the public is off. The American lawyer has become so imbedded in the vicious legal habit of never permitting a case once begun in this country to have an end, that the very thought of more courts, more traveling long distances to reach them, more appeals to appellate courts still farther away, fills the mind with uneasiness and apprehension.

It is all very well on paper. The Department of Justice is a people's affair; it will prosecute the people's causes, and all that; and it does—when it gets around to it, which is generally years after action would be of any benefit or satisfaction to the complainant. Leaving out of the calculation all thought of the possibility of a commerce court being packed, the question still remains, Do the shippers want a court sitting at Washington, where it would have brought before it the innumerable and interminable causes arising out of railway practice, making all subject to the accompanying horrors of "the law's delay"? It is doubtful.

It is one of the defects of our judicial system is that so much delay is permitted; that there is so much reverence for legal quibbling; and that our legislators are not content to correct the evil of the courts we have, but must magnify the evil by the creation of more of the same kind. The Commerce Commission has not yet been fully tested; nor has the Supreme Court as yet passed upon the questions affecting its powers and functions, such as its

rate-making power. Why not wait until the country knows "where it is at" in that regard before creating a new tribunal whose duties must be similarly adjusted before a litigant may feel sure that a decision rendered by it will stand the test of a constitutional quibble as to its jurisdiction?

CONCEALED SPACES.

The Michigan Millers' Mutual Fire Insurance Company has begun the valuable service of a series of fire bulletins, through the mediumship of which it is hoped to give every policy holder in that company the experience of every other patron who suffers a loss from know and preventable cause. The fire that gave occasion for Bulletin No. 1 might have been "made to order," so striking is the experience and the warning it carried.

It was the elevator of G. W. Detwiler at Henderson, Mich., burned on January 5, with a loss of \$6,750.02. The fire was undoubtedly caused by a defective chimney in the engine room, which became cracked between the ceiling and the roof. The fire was discovered almost immediately, but before it could be reached it had eaten its way into the elevator proper and was then beyond all control.

Here, then, we have a patent moral: avoid every and all concealed spaces; let every nook and corner be accessible and well lighted, whether used as a passage for a chimney flue or for an electric wire. Perhaps these may not always be avoided, but such spaces are more easily gotten into than may be imagined at first thought. Examine your own premises with this thought (and this fire) in view and see what you can do to guard against a repetition of just such a loss as they one reported; it will be easier than you think until you make the examination.

KILN-DRIED CORN.

The Illinois Railroad and Warehouse Commission has very wisely directed the inspection department not to inspect as of the No. 2 grade corn mixtures of dry and soft corn whose moisture content is not uniform but may average 16%, the moisture allowed under the rules. As stated by Mr. Merrill of the Chicago Board of Trade grain committee, it is by no means certain that 16% is a safe allowance of moisture in No. 2 corn going into store, the practice hitherto having been to allow at Chicago only about 13 to 13½%. This season's corn is a hard storage proposition, and if it goes through the winter and comes out of store next spring sound, the trade should be well satisfied; but the grain committee will take no chances on unevenly dried corn.

Kiln-drying is a most valuable function in handling grain, corn more particularly; but like every good thing that becomes commercialized it is liable to abuse. As pointed out at the hearing reported on another page, moderate drying helps corn greatly; raises the grade and improves its keeping quality; but bloated corn cannot be dried to a No. 3, much less to a No. 2. Too much reliance is placed by many handlers and driers on the theory that the capillary movement of water will equalize the

moisture content of a lot of corn, part of which has 12% of moisture and the other part 20%, making the average of 16% allowed under the rule; and many disappointments have resulted from dependence on the law. This is the practice the commission has forbidden.

The drier is nevertheless a good money maker and will continue to be so, properly used. It pays to dry corn only a little; drying improves even soft corn, notwithstanding excessive drying is unprofitable because it renders the grain more worthless, in a different way, than it would be if not dried at all.

ANTI-FUTURES LEGISLATION.

The usual grist of bills to prohibit "gambling in grain" have been consolidated in one bill at this session; but there is probably little prospect of such legislation going through the Senate, even should it "catch the Speaker's eye." The public has been told that the President has made a "thorough study" of "such gambling," but just where he did it does not appear, further than that Messrs. Scott and Burleson called on him the other day to enlighten him upon the extent of their misinformation on the entire subject; but that he was favorable to the Scott-Burleson-Lovering combination of ideas as claimed by some papers is not quite conceivable. That the President might be disposed to aid in the suppression of the bucket-shop comports with his general reputation for intelligence and sound moral ideas, but that he would go further than that would certainly surprise those who are ready to back him as a man of good common sense.

CROP REPORTS IN BUSHELS.

There are those who do not consider the percentage system used by the Government's crop guessers as at all reliable or satisfactory. In spite of the explanation of the *Crop Reporter*, reprinted on another page, of the way the percentage method is used and how it works out, the method is still confusing to all but the expert, and, paradoxical as it may seem to say so, it is also in effect indirect and circumlocutory. Men are accustomed to think about grain in terms of bushels not of percentages of "normals" that are themselves variable in time and place.

One does not quite understand, then, why the Government's experts cannot do the work of translating their percentage estimates into terms of bushels as well as the various private experts who attempt the same thing. When, however, King & Co. asked this question of the Crop Reporting Board, he was told that—

One objection to the plan is that by giving a quantitative estimate each month much confusion would arise. The estimate early in the season would probably circulate among poorly informed persons as an official report of the year's production. Another objection is that there are two ways of interpreting condition reports; one way indicating the actual condition of the crop at a specified date, the other forecasting a probable outcome of the crop. Some persons believe in one method of interpretation, and some the other. It is the province of this Bureau to give the facts as we find them; but it is questionable whether we should interpret such facts when such interpretation might lead to criticism by a large proportion of persons interested in the subject."

However, early in the season, at least, if at all, it really does not matter whether the per-

centage or bushel method is used—it's a guess any way. But if we are to keep on guessing at the ultimate size of the crops, the real reform called for is to have the Government and the state boards get together on their acreage estimates. As shown in these columns last month, they are wide apart. One or the other class of guessers is clearly wrong, which is it? As Sec'y Wilson is grandiloquent in his ideas of our agricultural greatness there is a grave suspicion, founded on the behavior of the market in the face of perfervid rhetoric when talking of crops, that the Crop Reporting Board has been inoculated with the same virus of megalomania and in consequence is running wild on its estimates. Is that the fact or not? That is really what the grain trade would like to be informed upon.

ELEVATORS AS PUBLIC UTILITIES.

The Manitoba government has decided to go into the elevator business, both at the terminals and at the local stations, making all grain elevators in the province "public utilities." The outline of this scheme is given in another place, and embodies the following general propositions:

1. To acquire or erect elevators by the issue of provincial forty-year bonds.
2. To offer to purchase elevators now in existence on a basis of valuation to be determined by an estimation of the cost of duplication, not at the value as a running concern, little attention being paid to vested rights.
3. To have administration by a commission above and beyond all political domination.
4. The commission to be named by the directors of the Grain Growers' Association, and appointed for life by the government.
5. No cost of operation or maintenance to be a charge upon the province, the elevator system when inaugurated to be self-sustaining.
6. All employees in connection with elevators to be engaged by the commission.
7. The head offices to be in Winnipeg where samples will be kept, and business transacted.
8. Particular attention to be paid to the special binning of wheat.
9. The system of operation to be based largely on the scheme upon which present owners operate. Inspection is provided for and daily reports, etc., are to be furnished to the head offices, from whom the quotations will be furnished.
10. The cost of establishing the system estimated at \$3,000,000, including remodeling of buildings to meet requirements of new conditions.
11. Commission to be responsible for shipments and weights.
12. Operators of elevators to have absolutely nothing to do with grading, beyond taking the samples.
13. Identity of grain to be preserved until placed on the market.

In order to make the system self-sustaining it is estimated that the following schedule of charges to be made at every house where grain is held on its way to the seaboard will form the sufficient revenue: 1¼c. per bu. for receiving, cleaning and storing wheat, 1c. for oats, 1½c. for barley and 2 cts. for flax, for the first 15 days, with a charge of 1-30 of 1c. per day afterward. For the enlargement of the system as the farmed area enlarges presumably more bonds will have to be issued from time to time; so that if the Canadian West develops as its land boomers now anticipate, the provinces (for the Saskatchewan government has tentatively approved a similar scheme) will have a tidy bit of money tied up.

Of course, this scheme must still be approved by the provincial parliament; but presumably the government anticipates no trouble there else it would not have projected the policy. The farmer in Manitoba is all powerful; no gov-

ernment could stand for a day that has his ill-will; and, so this surrender is apparently a complete one by the present party of office-holders.

APROPOS THE REPORTERS.

Talking of Patten and Pattenitis or Pattenphobia that affects so many people, otherwise of sound mind and memory, one cannot escape the conviction that about the most insistent kind of yellow-journalism crops right out in the daily market reports. It is pretty hard for the market-reporter to keep his head on the tenth page when the first is covered with wood-type headlines exploiting a pretty well established fake emanating from another desk. When the day is wholly uneventful on 'change the managing editor who delights in red ink on the first page will rarely rest content with anything less than either a boost or a knock for "Patten" to even up on the market page; and so having worked Patten to a finish as a bull gambler with wheat, what more natural than to work him as a bear gambler with May corn instead of a legitimate grain merchant? Mr. Patten is a big man; but one is inclined to think that the persistent sensationalizing of his doings (or the things he doesn't do) and the doings of others on 'change, reporting the day's business as the sporting editor does the "talent's" "winnings" on a horse-race, with the concurrent minimizing of space devoted to real news of the trade, is coming to approach the character of a scandal.

GOING FOR THE ELEVATOR MEN.

No man quite stable in economic thinking would approve off-hand any such project as the Manitoba scheme of taking over the grain elevators by the government. Government is no infallible thing; it is no better than the people, and graft is by no means unknown in Canadian governmental cliques. But the Manitoba farmers will never be satisfied until they have tried government ownership, and most probably they will not be entirely so after they have tried it.

The elevator men are of course uneasy, as they well may be; but one is not entirely sure they have not brought this trial upon themselves. The line houses in Canada have not been entirely generous in their treatment of the farmer; they have had the power to dictate and they have dictated. Their system has been all-powerful and it has been oppressive to some degree, how much is a matter of opinion; and the farmers are tired of this. The farmers and the government may find they have an elephant on their hands when the elevators get to be public utilities and must be operated, profitable or not; but at least they will have "taken a fall" out of their old friends, the elevator men, and that will be something to them by way of compensation.

If the elevator men can get full value for their houses they may be satisfied. The Grain Growers' method of computing the value of good will is not entirely encouraging to anyone expecting to get more than that. Some company managers who do not own or control hospital privileges would be entirely satisfied with a fair valuation on their tangible prop-

erty without estimating good will, provided nothing in the new law shall debar them from continuing in the market as buyers of grain and patrons of the public elevators just as the farmers would be. In such event, the expense and worry of making their elevators pay would be eliminated and their capital and energy could all be concentrated on the business of buying and selling grain, while Smith (the vote-payer) "would do the walking."

IMPORTANT CONFERENCE.

The brief notice of the meeting of the officers of the Illinois Association with representatives of the freight claim agents at Chicago on December 15 covers the ground, indeed, but it is altogether probable that the ultimate benefit resulting from the meeting will be out of all proportion to the character of the mention thereof. The claim problem is in a "state of flux"—in course of solution; and the somewhat arbitrary stands taken by the claimants and the carriers have begun to give way before a reasonable desire of both to come to an understanding. The roads must pay for loss and damage; that is settled law, and they know it, and no arbitrary rulings they may make as to what they will or will not do will avail in the face of the law; but claimants cannot expect to recover what they have not lost nor expect claim agents to allow claims not fully substantiated. The lack of method for arriving at the truth, we apprehend, is found rather in shippers' offices than in the claim offices; and a conference of this kind, if it should but define the fundamentals that are required by the carriers to evidence a valid claim, and that knowledge were made widely public, would be a long step toward the adjustment of more claims in a shorter time than is now the rule.

THE REAL THING.

Nowhere has the yield per acre of corn in small plots been greater in a field contest than in the Southeast,—the Carolinas, say. Even the boys in Louisiana, where corn is a new thing this year, do great things. This is encouraging. It is a great thing to see a boy get interested in farming; greater to see him stay on the farm by choice, trusting rather to make a good living as a farmer than to take a chance of breaking into accidental fame and fortune *via* a brakeman's job on a railroad: but these freak yields are not the real thing, after all. The corn farming that pays is the kind that is done down there in Fountain County, Ind., where the same prize winners for corn walk right up to the front year after year and pull down all the "large and juicy peaches." That kind of prize winning is not the result of a hothouse effort to win a prize but of a long continued effort, intelligently made, year after year. If we could only have more of that kind of farming, the corn crop would be doubled "in no time."

There is probably no investment that pays so well as the payment of association dues; so it is really remarkable how unreasonably "near" some men can be about a little matter of \$10 for that purpose.

EDITORIAL MENTION

If you do buy grain by the hundredweight, at least don't figure your margin at the bushel rate.

Talking about nerve, there's the first grain elevator at Mott, N. D., that has opened its doors for business and paid 87 cents for wheat the first day—and fifty miles from a railroad!

The soya bean continues to demand attention abroad, and to affect our own trade in grain. The question is, how soon will our own farmers take up this interesting plant in a really serious manner?

Culbertson, Mont., charges grain buyers a license fee of \$200 a year and lets saloon keepers off for \$120. It's cheaper to sell "rye" than to buy it it would seem. However, most city governments behave about as their people want them to.

Sec'y Coburn sends out from Kansas that annual "I-told-you-so" card showing Kansas' wonderful doings in agriculture: Grand total of farm products and live stock, \$532,685.244; increase over 1908, \$57,440,413. He modestly conceals how much of this is due to "Coburnism," but we know it's immense.

Columbia, Tenn., reports another prosecution under the "pure feed law" of a grain broker of Nashville, who sold a car of oats that at destination did not turn out as per "brand," in the opinion of the receivers. Query, as it seems the broker never saw the grain but acted only as middleman, where is the broker going to get off hereafter if this prosecution sticks?

Indiana has considerably more than 255 shipping firms in the grain business; but as that is the number of firms in the association of that state, it is clear enough the majority are willing to let the few do the "house-cleaning" of the trade and pay the bills, too. Is this generous? Is it—to be candid, now—the way real good neighbors ought to act under the circumstances?

The new Illinois law regulating the care of machinery to prevent accidents is now in force. It prohibits the use of the unprotected set-screw, and other devices upon machines that might lead to accidents are required to be rendered safe. The elevator is not a very dangerous place in that respect; but it would be well for owners to look over their premises; as accidents due to unsafe machinery are becoming very expensive.

Notice has already been given that the Burleson bill will be reintroduced in the House, revised to meet opposition to the bill raised last in the last Congress. The bill, as originally introduced, provided that speculators and traders in futures should be forbidden the use of the telegraph, mails, telephone, etc., under heavy penalty. It is claimed that the administration is averse to such legislation on the ground that it is inadvisable and impossible of enforcement; but will Mr. Taft be able to suppress a bill for

legislation that so many misinformed voters seem to desire passed?

The Ettelson bill in the Illinois legislature, would permit, should it become a law, the city of Chicago to construct and operate grain elevators and warehouses as well as docks and wharves as public utilities. The city needs the docks and wharves all right, for the use of the public; but when it comes to the city operating grain elevators and freight warehouses, "for the land's sake" let the line be drawn before we get quite to that.

We find on inquiry that the country newspaper stories from central Illinois of the inter-urban electric lines building elevators at their stations is misinformation. They are not building new houses, and the only elevator that was standing on the lines of the big syndicate down there has been removed or closed. Some grain is handled by trolley, it is said, in northeastern Ohio and in Iowa near Cedar Rapids by the trolley lines, but it does not appear to be a very profitable business for the lines, certainly not in Illinois.

The country newspapers that deprecate "gambling in grain" as a highly immoral and unethical proposition do not hesitate to commend the farmer who "holds his grain" for a higher price as a wise and far-seeing business man. Well, he is, if the bulls win; he isn't if the bears win; so we'll all be able to tell better next spring. However, no doubt it is wise on the whole for farmers to market their grain deliberately and in a regular stream from one end of the crop season to the other; but that otherwise it is wise *per se* to "hold" grain for a price is something "no feller can find out" beforehand or until he tries it.

The Updike Grain Co. of Omaha was recently threatened with legal proceedings at Harvard, Neb., under the anti-discrimination law, having, it is said, paid more for grain at one station than at another near by. "Naturally," said the naive local reporter, "the farmers who were getting the benefit of the high prices paid by the Omaha concern were much interested in the outcome of the action. When they found that it was a competitor in the grain buying business who was behind the prosecution the farmers rallied to the support of the Updike Company. Seeing the drift, the prosecution dismissed the case." Now, what do you think of that?

Farmers are again protesting in the Pacific Northwest at the grain sack expense of \$2,000,000 annually, but shipping grain bagged still obtains in difference to the ancient traditions of Pacific shipping. A couple of years ago it was said that a cargo of bulk wheat had been sent to Europe "on suspicion," so to say; but no one at Portland seems now to know anything about it. However, there are those there who expect to see the bag discarded eventually. "We are in hopes of some day having ships come here to Portland," says Fred. Muller of the Henrietta Milling Co., "equipped with all modern ventilating devices, so that it will be possible to ship in bulk. The danger of cargo shifting can be provided against by proper

loading and putting up of shifting boards. The whole grain business is now done on the sack basis, and it seems that to try it the other way is simply a question of somebody taking the initiative."

The opinion of Mr. Black of Ogilvie, that Canadian country elevators "are not now and never have been in our experience a commercial proposition by themselves," hardly coincides with the statement by a recent special writer for the Sunday papers, who said that a 40,000-bu. house in the Canadian West would pay for itself about once every three months during the season. This Sunday supplement writer must have had some very inside information, indeed.

There is one feature of the "hold-your-crop" movement that has not been freely estimated, and that is the effect of the disposition of many of the banks in the largest grain producing sections to loan money to the farmers and to discount their paper to a greater extent than in any former years, a fact that enables them to hold their grain. Many elevator men who are in close touch with the farmers say that this is a fact, and that it is the chief reason why farmers have not sold grain with more freedom since harvest.

The German bounty system, under which a substantial cash allowance is made to grain exporters, is an exceedingly ingenious device. If Germany were but a greater producer of grain, it is easy to see how by drawing an allowance out of all their own people for no service rendered, and by maintaining a scarcity of grain at home by means of a protective tariff, the Germans might command the grain trade wherever they might choose to enter in. As it is, their competition in neutral, or free, market is even now exceedingly hard to meet under any circumstances.

The truth about the strike situation in the Northwest is not clear. A local milling paper said a fortnight ago that the terminals were flooded with grain, but the roads themselves had begun accepting cars of grain for delivery as usual; while Minneapolis millers have been bidding freely for wheat to arrive. It is not improbable the weather has had more to do with railroad congestion in the West thus far since December 15 than the strike; and the weather is "deuced uncertain," except that it still looks bad.

Mr. Sunberg, president of the Iowa Corn Growers' Association in 1909, is opposed to the planting of 90-day corn in Iowa. He says: "If Iowa farmers should change their methods of raising corn, and grow a 90-day variety, the yield would decrease 50 per cent. If we should raise an early variety we would get twenty bushels an acre, while now we raise an average of forty bushels to the acre. It is better, we Iowa farmers have found, to grow a late variety and take a chance of its maturing, which it nearly always does, than to grow an early variety and get a smaller yield." That may be true enough in Mr. Sunberg's locality. But that farmers in the northern quarter of Iowa should go on planting 120-day (big) corn and getting year after year almost no

marketable corn on their undrained lands, while they might get even 20 bushels to the acre of marketable 90-day corn, is sheer stupidity; but they do it just the same.

France is making a new tariff bill which screws up rates another turn or two; and the bill went through the deputies on December 29 practically unanimously. Whether it is ultimately passed or defeated will scarcely interest grain exporters from this country, seeing the present French tariffs are so high that, except in the matter of durum wheat, there is practically no trade in grain with that country. One feature of the bill, however, is interesting, to-wit, the arbitration clause to be inserted in future commercial treaties, which provides that tariff disputes between the signatory countries shall be referred to the Hague for "compulsory arbitration."

The arbitration decisions published from time to time in these columns are especially commended to the study of the trade. Happily, the grain trade is trying hard to avoid getting into the courts—arbitration is a cheaper, more speedy and a more equitable manner of settling disputes. Trade custom, whether it agrees with law or not, has come to be the law of the trade; and these decisions, more than anything that can be pointed to, formulate the established custom of the trade, as well as the opinions of fair men as to what constitutes the trade equities under given conditions. The decision in this number, by the National Association Committee, is peculiarly a case in point as to the latter idea.

The provisional trade truce with Germany ends on February 7, when the maximum duties will be in force against American raw materials and other products. As the German tariff was made in the first instance to suit the farmers, the agrarians, there is little expectation that the terms of the maximum scale will be remitted in any degree in favor of any of our exports. There is talk of a new agreement between the countries, but it is only talk apparently, and on February 7, Germany's autonomous or prohibitive tariff rates will automatically go into effect. This will, of course, constitute undue discrimination in the eyes of the Payne-Aldrich law, and the American maximum rates will therefore go automatically into effect against German imports. Then what?

The rice growers of the Gulf littoral take some comfort in the current high prices for meat, in the belief that the forced exclusion of meat from it means the increase of rice in the American dietary. Perhaps; but the belief would be better justified if we did not know that the rice growers also are adopting the universal tactics of trying to artificially keep the price of rice at the highest possible level and so curtail its consumption, just as the consumption of meat is curtailed. In citing the Japanese as a remarkably hardy race who live mostly on rice as a cereal, it must not be overlooked that the preparations of the soya bean, used by the Japanese, take the place of meat (protein) in their dietary, and thus they are better able to eat rice in large quantities than Americans would be. In the days to

come it may be that the American poor also may learn to eat "soy" in the same way, and so be able to cut down their meat bill without loss of food value.

Mr. Olmsted's plan for improving the crop report by putting more special agents in the field and by inspecting the volunteer reporters, will commend itself as good, as far as it goes. The point is well taken that those who work for nothing and find themselves need watching. Usually that kind of labor is not considered worth very much. It may be to the Government, but there is a suspicion that even the Government does not get much out of it. Whether inspection would greatly improve its character may be doubted, but at least it could do it no injury. Besides, as the volunteers must be relied on for a long time to come,—for Congress is not likely to stop building battle-ships now to pay crop reporters,—anything that even hints at improving the service ought to be treated with consideration.

An amendment was adopted the other day by the Chicago Board of Trade, giving the directors power "to scrutinize closely all partnership contracts entered into by members of the board. If the directors find that partnership relations have been entered into by members with persons believed to be of a class injurious to the interests or good name of the Board of Trade, they may require the member offending against this rule to withdraw from such partnership, and, in case he does not, to suspend him until the partnership is discontinued." In other words a member of the Board must be not merely an honorable man himself but his business connections must be of the same order; men of savory reputation whose records would prevent their becoming members of the Board will not be permitted to break in indirectly by sheltering themselves behind the honorable character of other men.

Speaking again of the potato crop in Germany, it appears that it amounts to over 45 million tons. Just how much is used for food is not published but the amount is very large; but it is well known that immense quantities of potato starch and dextrine are manufactured by the Germans. Indeed, in the production of these commodities, the Germans use potatoes in lieu of corn, as with us. Potato starch is converted into yellow or white dextrine as desired by heat or by acid, and the starch is used also for making potato syrup or glucose, the latter, upon being boiled and treated with acid, being converted into grape sugar. Potato glucose is chiefly consumed in bakeries and confectioneries, in rice mills for polishing purposes, and is mixed with sugar glucose to produce bonbons and an imitation of honey. Grape sugar is taken up chiefly by breweries for the manufacture of coloring for beer, and is also used for adding to the weight of leather. In the United States glucose is manufactured from corn, and exported to Germany and England. The German potato glucose is alleged to contain less sulphuric acid than corn glucose, but, being dearer, it does not find as large a market in England as does its American rival. All of which, however, is another straw explaining why American corn

is not the "whole thing" everywhere that it once was.

"A case came to light the other day," says the Bloomington Pantagraph, "of a grain transaction in one of the smaller towns of the county, in which the owner of the corn was offered an extra good price, but was told by the dealer that he could not assure the grading, owing to the uncertainty of the Chicago method. The owner therefore decided to hold the corn until January or February and thus run the chance of getting a lower price rather than sell now and run the chance of being graded down." Considering that Mr. Cowan's inspectors are being criticised in Chicago for the leniency rather than the stiffness of their grading on corn this winter, one has a suspicion that the said dealer was putting one over on his customer—not a very clever thing to do just now.

The Illinois law regulating the transportation of grain is clear enough; it is explicit and comprehensive enough for any one. It needs next to no amending—only enforcing; and now that the state association employs an attorney to look after the dealers' interests, its enforcement need be a burden on no one to an intolerable extent, as it was before the association undertook to help its members in their claim battles. If one were to suggest any change in the law as it stands, it would be to have Sec. 119, relating to track scales, repealed. Railroad track scales are not the best on which to weigh grain even when they are in the best of order, and there are few towns of any size where they can be found or kept in proper condition for weighing grain or any other commodity worth a cent or more a pound.

Frost killed a large part of the corn crop of Mexico and very early the demand became acute for foreign grain, prices months ago having advanced to what the Mexican Herald calls the "record high price" of \$13.50 to \$14.50 per carga; that is to say, \$6.75 to \$7.25 per 300 lbs., or 2¼ to 2½c. per pound. Naturally, with the duty reduced or removed, there has been some movement of American corn in that direction, but the amount has been exaggerated, in the view of Kansas City dealers who are interested, one of whom believes 50,000 bus. was the total sent there up to December 15. The corn asked for is kiln-dry white grain. Dealers, however, find that Argentine shippers are able to make a better price c. i. f., and the bargaining by Mexican importers (Banco Central Mexicano) for 300,000 tons is with Buenos Aires rather than with American shippers. The fact reminds us again that Americans are no longer the "whole thing" in the export trade; and "this deal between the two growing Latin-American republics," the Mexican Herald ventures to predict, "is probably the beginning of a revolution in the trade of the Western continent. Argentina is the greatest grain exporting country in the world, and lack of proper transportation facilities and acquaintance between their respective importers and exporters is the only factor which has kept Argentine grain from coming into Mexico with a rush, to the mutual advantage of the two countries."

TRADE NOTES

The Ellis Drier Co., of the Postal Telegraph Building, Chicago, made a very large number of installations of their Ellis Drier the past year.

Bulletin No. 17, published by the Jeffrey Manufacturing Company of Columbus, Ohio, treats of their mine locomotives. It is an attractive book, well printed and illustrated.

Fred Friedline & Company, of Chicago, finished a very satisfactory year of grain elevator building with the close of 1909. The volume of business done was large, especially in the South.

"Graphite" for December, published by the Joseph Dixon Crucible Co., of Jersey City, N. J., contains some unusually good articles on the subject of lubrication in which every power user is interested.

The Macdonald Engineering Co., Chicago, is building a reinforced concrete grain storage of 50,000 bushels capacity for the Allegheny Milling Co., of Covington, Va. The bins are 10 feet square and will be 50 feet deep.

Fred W. Kennedy, of Shelbyville, Ind., reports that orders are constantly increasing for Kennedy Car Liners. Grain elevator men have learned through actual experience of the saving due to the linings and hence the increasing business.

An American Consular officer in Russia has forwarded to "Daily Consular and Trade Reports," Washington, D. C., opportunities for the extension of American trade in Russia, grain elevator machinery is included among the list of machines wanted.

The Burrell Engineering & Construction Co., Chicago, did the largest business in grain elevator building during 1909 in the history of this firm. The type of elevator which they build has grown deservedly popular over the middle central states and west.

The American Machinery & Construction Co., of Milwaukee, Wis., has sold one No. 2 American Cyclone Aspirator to Blish Milling Co., of Seymour, Ind., for final cleaning of wheat and two No. 1 American Cyclone Aspirators to Brockman Ker Milling Co., Victoria, B. C., for cleaning wheat.

A sky line poster comes to us this month from the Richardson Scale Co., of New York. A handsome model of the 1910 Richardson Automatic Scale is shown over the sky line of New York and the two are termed "the two greatest lines on earth." Proof to substantiate this fact is given on the reverse page where the superior features of Richardson Scale are illustrated.

The Minneapolis Steel & Machinery Co., of Minneapolis, Minn., held a conference of its district representatives and department managers on December 14, 15 and 16. Daily sessions were held at which papers were read by G. M. Gillette, G. W. Pope, A. M. Burch, A. H. Allen, J. L. Record, R. P. Gillette, Jos. Garbett, E. Brozezinski, E. Levertou, J. R. Ware, Geo. L. Gary, E. F. Woodcock, E. A. Merrill, each paper being followed by a general discussion of the subject presented. This is the first yearly meeting of the Minneapolis Steel & Machinery Co. and was attended by all its salesmen from its various agencies and the company feel that it has resulted in great good in bringing its representatives together with the home office, discussing its business policies and plans for the coming year, and it is the intention hereafter to hold these meetings annually. Included in the entertainment was a theater party and banquet.

From the time that James Stewart [1819-1902] founded the present firm of James Stewart & Company, with head offices in New York City and branches in the larger cities of the country, they have done a very large amount and an infinite variety of heavy construction work, including not merely grain elevators, as our readers might imagine from the extensive business done in that particular line, but office, hotel and other public buildings, railway work and industrial plants have been built in all sections of this country and in England, so that almost every large city has some type of building as an example of this firm's work. Some of the

largest and most typical of these structures have been set forth by illustrations made from photographs in a book just received at this office entitled, "Some Stewart Structures." In view, however, of the large number of contracts executed over a period of years, it was found necessary to restrict the scope to representative buildings erected within the past ten years. To give an idea of the scope of work illustrated in this book it may be said that there are over 100 contracts illustrated and over 500 half-tones employed for that purpose. Many very beautiful interiors of buildings are shown, such as the banking rooms of the National Bank of St. Louis; the Diamond National Bank, Pittsburg; the National Bank of Commerce, Norfolk, Va.; views of the Midland Hotel, Manchester, England; in the Savoy Hotel, London; in the Allen County Court House, Fort Wayne, Ind.; the Orpheum Theater, San Francisco; and so on. There are views of all sorts of great industrial plants, of heavy railway work power plants, etc. The pictures of grain elevators include some sixty structures, some of which are further illustrated by interior views and comprehensively described in brief articles, the whole being introduced by a valuable chapter on "Progress in Elevator Construction." The line embraces elevators in all the terminal markets and of different capacities and types. Interior views are shown of the New York City general offices, the Chicago offices and St. Louis offices of the company. The Chicago offices are devoted especially to the grain elevator branch of the business and at the head of this department are W. R. Sinks, manager, and R. H. Folwell, engineer. The book is one of the most complete that we have seen of grain elevator and heavy construction work and marks an epoch in this character of literature. All in all, it is perhaps the most elegant and comprehensive trade publication that has ever come to us.

Samples of the Chinese Soy bean were received at Chicago on November 16 by the Corn Products Company. It is expected the exports of the beans from Manchuria this year will aggregate 40,000,000 bushels, displacing a large quantity of corn, oats and barley.

RECEIPTS AND SHIPMENTS FOR 1909.

Following is a statement of the receipts and shipments of leading markets as reported from official sources:

BOSTON—Reported by Jas. A. McKibben, Secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	9,465,984	8,946,146	9,394,970	10,777,227
Corn, bu.....	2,948,486	1,916,188	2,067,014	1,058,351
Oats, bu.....	4,217,979	4,142,831	20,580	65,739
Barley, bu.....	406,883	238,703	333,124	225,726
Rye, bu.....	60,866	318,518	36,630	306,903
Flax Seed, bu....	191,254	60,610	126,885	47,856
Hay, tons.....	140,830	131,320	12,762	1,922
Flour, bbls.....	1,916,156	1,959,526	616,253	812,419

BUFFALO—Reported by Fenton M. Parke, Secretary of the Chamber of Commerce.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	61,084,797	63,857,080	6,306,164	6,010,608
Corn, bu.....	16,027,578	13,779,988	2,586,130	2,113,660
Oats, bu.....	13,110,014	10,455,716	4,972,742	3,809,668
Barley, bu.....	12,765,503	11,649,034	2,324,307	2,394,778
Rye, bu.....	655,684	856,944	217,916	75,450
Grass Seed, bu....	211,851	280,196	.....	.....

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Flax Seed, bu....	9,771,809	13,646,646	5,501,416	110,285,936
Broom Corn, bales	5,555	11,093	.....	.....
Flour, bbls.....	7,896,292	7,818,248	.....	.....

CINCINNATI—Reported by C. B. Murray, Superintendent of the Chamber of Commerce.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	4,874,871	4,963,264	4,340,416	4,694,596
Corn, bu.....	10,344,408	10,029,457	7,202,444	6,943,360
Oats, bu.....	17,273,766	6,616,273	15,916,804	4,001,401
Barley, bu.....	540,156	668,459	55,032	14,936
Rye, bu.....	684,847	587,522	261,501	267,628
Malt, bu.....	1,672,434	1,530,340	445,651	463,036
Timothy Seed, bags	45,656	57,037	45,955	27,378
Clover Seed, bags	43,757	38,219	42,900	31,736
Oth. Gr. Seed, bags	148,650	123,996	138,031	118,277
Hay, tons.....	167,263	156,151	115,322	110,053
Flour, bbls.....	1,402,331	1,449,434	914,878	957,773

CLEVELAND—Reported by M. A. Havens, Secretary of the Chamber of Commerce.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	519,737	1,407,178	425,053	421,421
Corn, bu.....	5,444,425	5,079,130	1,258,459	1,097,738
Oats, bu.....	7,596,394	6,108,836	1,709,451	1,289,783
Barley, bu.....	409,969	181,399	4,108	4,600
Rye, bu.....	133,652	1,001	5,421	.....
Flax Seed, bu....	32	79,025	34	.....
Hay, tons.....	67,626	56,705	6,492	5,246
Flour, bbls.....	649,340	763,890	136,240	194,950

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	746,000	396,207	105,000	110,000
Corn, bu.....	10,700	.....	.....	.....
Barley, bu.....	120,000	92,500	.....	.....
Flax Seed, bu....	888,499	828,056	10,500	.....
Oats, bu.....	1,133,524	.....	.....	.....
Flour, bbls.....	370	.....	.....	.....
Hay, tons.....	127	.....	.....	1,200

CHICAGO—Reported by Geo. F. Stone, Secretary of the Board of Trade.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	26,985,112	21,168,442	23,484,171	22,579,044
Corn, bu.....	90,894,920	91,169,147	72,835,839	69,692,749
Oats, bu.....	87,884,238	92,529,017	77,288,653	79,857,557
Rye, bu.....	1,426,350	1,646,118	903,569	1,279,276
Barley, bu.....	27,061,614	23,696,615	8,556,086	8,063,151
Timothy Seed, lbs.	51,066,739	56,710,572	20,673,915	26,726,640
Clover Seed, lbs..	5,551,664	7,303,420	4,669,531	5,348,089
Oth. Gr. Seed, lbs.	34,373,910	19,569,566	50,705,116	51,262,381
Flax Seed, bu....	1,199,110	2,119,335	150,934	213,984
Broom Corn, lbs..	10,970,204	19,653,146	9,127,816	12,177,697
Flour, bbls.....	8,526,207	9,496,037	8,316,930	9,180,355

DETROIT—Reported by F. W. Waring, Secretary of the Board of Trade.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	2,652,932	.....	134,561	.....
Corn, bu.....	2,659,692	.....	1,190,736	.....
Oats, bu.....	2,591,389	.....	598,814	.....
Barley, bu.....	558,336	.....	3,952	.....
Rye, bu.....	268,747	.....	181,698	.....
Flour, bbls.....	229,567	.....	267,151	.....

DULUTH—Reported by Chas. F. McDonald, Secretary of the Board of Trade.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	56,084,971	57,593,329	58,095,219	53,284,159
Corn, bu.....	1,224,854	33,923	1,257,734	1,043
Oats, bu.....	5,117,447	6,046,303	5,179,727	5,546,508
Barley, bu.....	10,509,130	9,210,429	10,576,689	8,888,554
Rye, bu.....	552,954	842,911	558,619	845,466
Flax Seed, bu....	10,127,291	14,929,662	10,697,430	16,696,600
Flour, bbls.....	4,977,050	3,995,200	5,593,095	4,577,050
Flour production.	624,240	591,765	.....	.....

Note:—Bonded grain included in yearly statement.

GALVESTON—Reported by C. McD. Robinson, Chief Inspector of the Cotton Exchange & Board of Trade.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	3,766,165	9,471,170	2,796,660	7,965,682
Corn, bu.....	3,539,829	7,988,869	3,507,734	8,013,842
Flour, bbls.....	441,581	502,390	411,023	470,665

KANSAS CITY—Reported by E. D. Bigelow, Secretary of the Board of Trade.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	35,354,000	.....	25,272,500	.....
Corn, bu.....	11,557,150	.....	9,357,550	.....
Oats, bu.....	6,349,500	.....	5,853,000	.....
Barley, bu.....	421,300	.....	123,200	.....
Rye, bu.....	122,100	.....	53,900	.....
Flax Seed, bu....	102,000	.....	9,000	.....
Bran, tons.....	21,140	.....	96,180	.....
Hay, tons.....	196,512	.....	40,264	.....
Flour, bbls.....	185,000	.....	2,205,450	.....

MILWAUKEE—Reported by H. A. Plumb, Secretary of the Chamber of Commerce.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	8,871,926	12,995,269	2,670,310	6,365,357
Corn, bu.....	5,990,300	3,872,000	5,960,035	3,030,202
Oats, bu.....	8,908,700	12,984,000	5,616,877	9,051,216
Barley, bu.....	12,669,800	16,115,233	5,208,061	9,318,604
Rye, bu.....	1,049,700	1,329,000	695,010	853,140
Timothy Seed, lbs	7,556,006	7,383,228	2,692,494	3,973,700
Clover Seed, lbs..	6,858,587	7,342,493	6,298,920	4,220,918
Flax Seed, bu....	349,800	546,900	1,990	4,240
Hay, tons.....	27,921	35,198	854	1,290
Flour, bbls.....	3,468,178	2,678,570	4,240,042	3,752,033

MINNEAPOLIS—Reported by E. S. Hughes, Assistant Secretary of the Chamber of Commerce.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	81,111,410	91,739,900	2,698,500	19,293,860
Corn, bu.....	5,082,850	4,776,870	3,124,500	1,966,780
Oats, bu.....	14,057,230	16,717,480	15,323,920	16,877,210
Barley, bu.....	20,235,500	18,427,610	18,000,120	18,163,130
Rye, bu.....	2,236,560	1,931,880	1,241,530	1,279,900
Flax Seed, bu....	7,600,010	12,596,710	1,802,030	2,609,590

NEW YORK—Reported by H. Heinger, Statistician of the Produce Exchange.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	23,304,300	27,797,800	17,589,885	27,035,674
Corn, bu.....	7,428,005	8,057,305	3,677,253	4,613,194
Oats, bu.....	22,717,562	23,853,600	477,134	619,609
Barley, bu.....	3,469,325	4,152,765	934,080	567,487
Rye, bu.....	300,100	867,850	216,470	1,206,325
Peas, bu.....	275,095	277,540	104,593	161,765
Corn Meal, bbls..	494,272	489,886	137,144	167,768
Flour, bbls.....	7,069,142	7,793,843	2,956,301	3,219,968

OMAHA—Reported by E. P. Manchester, Secretary of the Omaha Grain Exchange.

Articles.	Lake.		Canal.	
	1909.	1908.	1909.	1908.
Wheat, bu.....	9,979,200	14,962,800	6,511,000	11,450,000
Corn, bu.....	22,391,600	13,137,300	17,933,000	10,325,000
Oats, bu.....	10,324,800	15,076,800	9,553,000	12,958,000
Barley, bu.....	578,000	634,000	375,000	160,000
Rye, bu.....	196,000	181,900	185,000	168,000

FINAL ESTIMATE OF THE CROP.

The final estimates of the Department of Agriculture indicate the harvested acreage, production and value of important farm crops of the United States in 1909 and 1908 to have been as follows with value per bushel and total value:

	Acreage.	*Production, bu.	Value.
Corn, 1909.....	108,771,000	2,772,376,000	59.6 \$1,652,822,000
Corn, 1908.....	101,788,000	2,668,651,000	60.6 1,616,145,000
Wtr. wh't, 1909	28,330,000	446,366,000	102.9 459,154,000
Wtr. wh't, 1908	30,349,000	437,908,000	93.7 410,330,000
Sprg. wh't, 1909	18,333,000	290,823,000	93.1 270,892,000
Sprg. wh't, 1908	17,208,000	226,694,000	91.1 206,496,000
All wheat, 1909	46,723,000	737,189,000	99.0 730,046,000
All wheat, 1908	47,557,000	664,602,000	92.8 616,826,000
Oats, 1909.....	33,204,000	1,007,353,000	40.5 408,174,000
Oats, 1908.....	32,344,000	807,156,000	47.2 381,171,000
Barley, 1909.....	7,011,000	170,284,000	55.2 93,971,000
Barley, 1908.....	6,646,000	166,756,000	55.4 92,442,000
Rye, 1909.....	2,006,000	32,239,000	73.9 23,809,000
Rye, 1908.....	1,948,000	31,851,000	73.6 23,455,000
Buckwheat, 1909	834,000	17,438,000	69.9 12,188,000
Buckwheat, 1908	803,000	15,874,000	75.6 12,004,000
Flaxseed, 1909..	2,742,000	25,856,000	152.6 39,466,000
Flaxseed, 1908..	2,679,000	25,805,000	118.4 30,577,000
Rice, 1909.....	720,225	24,368,000	79.4 19,341,000
Rice, 1908.....	655,000	21,890,000	81.2 17,771,000
Potatoes, 1909..	3,525,000	376,537,000	54.9 206,545,000
Potatoes, 1908..	3,257,000	278,985,000	70.6 197,039,000
Hay, 1909, tons.	45,744,000	64,938,000	\$10.62 689,345,000
Hay, 1908, tons.	46,486,000	70,798,000	\$8.98 635,423,000
Tobacco, 1909..	1,180,000	949,357,000	\$10.1 9,719,000
Tobacco, 1908..	875,000	718,061,000	\$10.3 74,120,000

*Bushels of weight. †Per pound.

The average weight per measured bushel is shown by reports received by the bureau to be 57.1 pounds for spring wheat, 58.4 pounds for winter wheat and 32.7 pounds for oats, against 57.3, 58.8 and 29.8 pounds respectively last year. The quality of corn is 84.2 per cent, against 86.9 last year.

RECEIPTS OF WHEAT AT PRIMARY MARKETS.

Receipts of wheat at winter and spring grain markets for 28 weeks, since June, with comparisons, in bushels, compiled by the Cincinnati Price Current:

	1909-10	1908-09
St. Louis.....	17,198,000	13,312,000
Toledo.....	3,581,000	3,370,000
Detroit.....	1,899,000	1,693,000
Kansas City.....	26,945,000	29,620,000
Winter Wheat.....	49,623,000	47,995,000
Chicago.....	21,852,000	16,268,000
Minneapolis.....	5,714,000	7,333,000
Duluth.....	54,015,000	56,758,000
Aggregate 28 weeks.....	179,858,000	174,859,000

Total receipts of winter and spring wheat at primary markets 28 weeks since June, 1909, with comparisons.

	Winter	Spring	Total
1909.....	49,623,000	130,235,000	179,858,000
1908.....	47,995,000	126,864,000	174,859,000
1907.....	41,761,000	104,153,000	145,914,000
1906.....	48,012,000	111,692,000	159,704,000
1905.....	53,632,000	119,917,000	173,549,000

EXPORTS AND IMPORTS.

The following is a statement of the exports and imports of various cereals, seeds, etc., for the month of November, 1909, and for the eleven months ending with November, 1909, as reported by the Bureau of Statistics, Department of Commerce and Labor (quantities only unless otherwise stated):

ARTICLES.	NOVEMBER, 1909.		ELEVEN MONTHS, ENDING NOVEMBER	
	1908	1909	1908	1909
Exports—				
Barley, bu.....	1,321,913	810,285	5,757,034	4,226,949
Buckwheat, bu.....	175	5,512	51,103	200,126
Corn, bu.....	3,153,491	2,350,935	31,125,065	30,234,707
Corn Meal, bbls.....	20,569	29,277	318,350	40,200
Oats, bu.....	244,533	217,391	1,121,714	1,176,936
Oatmeal, lbs.....	327,383	1,927,270	19,922,403	15,917,131
Rye, bu.....	64,268	11	2,695,109	397,924
Rye Flour, bbls.....	412	318	4,208	2,828
Wheat, bu.....	6,752,704	8,427,421	87,002,684	44,762,475
Wheat Flour, bbls.....	1,147,992	1,015,190	11,795,889	8,488,238
Bran, Millfeed, etc., tons.....	2,775	5,623	73,938	49,159
Dried Grains, etc. tons	2,589	4,240	63,510	67,838
Malt, bu.....	15,152	11,308	145,179	120,342
Rice, lbs.....	153,677	260,671	1,254,003	2,273,317
Rice Bran, Meal, etc., lbs.....	1,957,805	3,689,573	18,895,597	19,422,758
Clover Seed, lbs.....	1,784,229	1,267,860	6,497,953	13,046,716
Flax Seed, bu.....	37	83,120	1,395,505	36,141
Timothy Seed, lbs.....	3,122,155	4,047,189	21,204,887	21,033,172
Other Grass Seed, val.	\$78,579	\$177,423	\$370,493	\$551,932
Beans, etc., bu.....	33,883	47,666	251,293	231,214
Imports—				
Oats, bu.....	520,064	17,195	2,434,524	4,358,393
Wheat, bu.....	1,733	2,882	30,053	22,332
Wheat Flour, bbls.....	3,193	9,223	27,354	102,805
Rice, lbs.....	5,548,985	6,245,790	80,523,851	80,439,091
Rice Bran, Meal, etc., lbs.....	9,023,898	10,990,821	123,352,548	126,041,983
Castor Beans, bu.....		95,790		330,558
Clover Seed, lbs.....	624,690	768,800	15,230,637	14,297,474
Flax Seed, bu.....	491	50,530	35,078	973,162
Beans, etc., bu.....	108,684	30,413	2,045,872	2,878,972

While working at the Farmers' Grain Co.'s elevator, Charles Corwin was caught in a drag chain and sustained severe cuts in the face and back of the head. He was aged 35 years and is married.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of December, 1909:

BALTIMORE—Reported by James B. Hessong, Secretary of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1909	1908	1909	1908
Wheat, bushels.....	636,347	317,331	539,202	144,133
Corn, bushels.....	3,414,873	1,971,895	1,434,187	1,201,395
Oats, bushels.....	90,784	168,175		652
Barley, bushels.....	833	37,125		
Rye, bushels.....	25,709	38,429		
Timothy Seed, lbs.....	2,254	2,936	8,729	5,180
Clover Seed, lbs.....	1,505	8,061	1,897	1,356
Hay, tons.....	3,914	5,123	1,311	766
Flour, barrels.....	233,835	226,996	117,050	164,440

BOSTON—Reported by James A. McKibben, Secretary of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1909	1908	1909	1908
Flour, barrels.....	206,858	227,551	119,940	127,343
Wheat, bushels.....	1,400,851	2,185,241	1,583,789	1,527,932
Corn, bushels.....	280,270	263,099	350,104	154,767
Oats, bushels.....	363,863	403,427	2,960	
Rye, bushels.....	6,124	69,478		51,457
Barley, bushels.....	8,746	11,355		72,469
Flaxseed, bushels.....	111,993		89,573	
Peas, bushels.....	9,148	15,960	4,063	
Millfeed, tons.....	3,595	1,389		54
Corn Meal, barrels.....	3,855	7,566	2,015	3,109
Oat Meal, barrels.....	21,343	12,869	8,168	16,625
Oat Meal, sacks.....	8,205	34,290	12,209	26,706
Hay, tons.....	13,750	13,840	2,493	639

CHICAGO—Reported by George F. Stone, Secretary of the Board of Trade.

Articles	Receipts		Shipments	
	1909	1908	1909	1908
Wheat, bushels.....	1,566,600	1,289,225	1,127,521	861,403
Corn, bushels.....	10,274,350	12,437,515	3,726,484	6,166,053
Oats, bushels.....	5,675,662	6,882,821	5,404,474	6,470,439
Barley, bushels.....	1,937,158	2,513,376	521,928	878,633
Rye, bushels.....	140,500	166,071	23,844	190,939
Timothy Seed, lbs.....	1,495,820	4,801,765	1,751,503	3,243,570
Clover Seed, lbs.....	61,500	948,890	204,800	892,977
Other Grass Seeds, lbs.....	1,802,103	3,446,971	1,933,411	3,503,533
Flax Seed, bushels.....	76,000	339,285	11,519	7,445
Broom Corn, lbs.....	712,146	2,541,801	492,692	1,445,703
Hay, tons.....	17,942	25,961	1,334	2,410
Flour, barrels.....	591,034	792,219	527,495	793,630

CINCINNATI—Reported by C. B. Murray, Superintendent of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1909	1908	1909	1908
Wheat, bushels.....	264,404	341,978	247,592	346,944
Corn, bushels.....	887,206	726,896	487,728	351,772
Oats, bushels.....	450,214	426,378	304,848	184,883
Barley, bushels.....	64,128	65,150	1,000	1,000
Rye, bushels.....	89,266	58,868	36,287	41,540
Malt, bushels.....	175,226	114,050	42,000	49,660
Timothy Seed, lbs.....	1,268	5,224	5,422	1,994
Clover Seed, lbs.....	2,824	7,014	2,767	5,458
Other Grass Seed, lbs.....	18,539	15,077	13,348	15,037
Hay, tons.....	16,098	13,394	9,552	7,582
Flour, bbls.....	131,511	123,962	82,449	97,250

CLEVELAND—Reported by M. A. Havens, Secretary of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1909	1908	1909	1908
Wheat, bushels.....	19,477	12,210	139,690	3,990
Corn, bushels.....	1,184,753	672,620	310,215	114,150
Oats, bushels.....	325,363	383,710	67,337	240,380
Barley, bushels.....	16,976	17,290		
Rye, bushels.....	31,588	270		
Flax Seed, bushels.....				
Hay, tons.....	5,155	5,371	535	293
Flour, bbls.....	31,870	39,940	14,070	14,820
By Lake—				
Wheat, bushels.....	95,000	200,150		110,000
Barley, bushels.....		92,500		
Flax Seed, bushels.....	432,600	401,000		
Flour, bbls.....				1,200

DETROIT—Reported by F. W. Waring, Secretary of the Board of Trade.

Articles	Receipts		Shipments	
	1909	1908	1909	1908
Wheat, bushels.....	546,190	586,936	10,722	6,700
Corn, bushels.....	470,442	291,230	186,980	129,688
Oats, bushels.....	180,013	248,282	55,029	90,440
Barley, bushels.....	49,382	35,500	987	
Rye, bushels.....	26,036	22,044	17,258	32,796
Flour, barrels.....	16,824	25,800	25,396	10,800

DULUTH—Reported by Chas. F. MacDonald, Secretary of the Board of Trade.

Articles	Receipts		Shipments	
	1909	1908	1909	1908
Wheat, bushels.....	2,807,118	3,803,832	5,454,720	5,784,351
Corn, bushels.....				
Oats, bushels.....	498,182	452,296	862,873	966,653
Barley, bushels.....	673,058	777,426	925,934	1,135,333
Rye, bushels.....	39,619	48,287	59,404	220,074
Flax Seed, bushels.....	610,665	1,238,874	3,179,347	3,342,046
Flour, bbls.....	159,500	86,500	432,500	277,065

GALVESTON—Reported by C. McD. Robinson, Chief Inspector of the Cotton Exchange and Board of Trade.

Articles	Receipts		Shipments	
	1909	1908	1909	1908
Wheat, bushels.....		188,138		246,480
Corn, bushels.....		642,856		2,147,485

KANSAS CITY—Reported by E. D. Bigelow, Secretary of Board of Trade.

Wheat, bushels.....	1 569,700	2 077,900	1 299,100	1 442,100
Corn, bushels.....	1 044,900	960,250	572,700	408,250
Oats, bushels.....	280,500	474,000	408,000	546,000
Barley, bushels.....	22,100	67,100	8,800	4,400
Rye, bushels.....	5,500	47,300	1,100	13,200
Bran, lbs.....	1 420	1 920	6 600	6 200
Flax Seed, bushels.....	1 000	5 000	2 000	-----
Hay, tons.....	20 520	16 212	3 360	3 820
Flour, barrels.....	16,000	17,750	166,750	204,750

ELEVATOR AND GRAIN NEWS

ILLINOIS.

The Herdman Grain Company of Morrisonville, Ill., has dissolved.

Fred Cloldt will install a Hall Signaling Grain Distributor at Beecher, Ill.

The elevator at Fullerton, DeWitt County, Ill., has been sold to O. A. De Long of Washington, Iowa.

John F. Wallace has purchased a half interest in the grain business of R. J. Riley at Forrest, Ill.

The elevator of A. S. Harshbarger at Virden, Ill., has been purchased by Kime & Gibson, who took possession on January 1.

Oscar Jones has sold his grain business at Chrisman, Ill., to F. K. Thayer, who will conduct it under the style, Thayer Elevator Co.

George Couch & Sons contemplate the erection of a large grain elevator in the spring near the site of their present grain house at Salem, Ill.

The Windsor Grain Co. has definitely decided to build another elevator in Windsor, Ill., to take the place of the one destroyed by fire a year ago.

The J. P. Garber Grain Co., at Roanoke, Ill., is now operating under the style, Garber & Belsley, the latter recently having become a member of the firm.

John Nelson has about completed an elevator with 35,000 bushels capacity at Hooper station, four miles southeast of Donovan, Iroquois County, Ill.

The Stanard-Tilton Milling Co. began putting wheat in the new 100,000-bushel elevator at Alton, Ill., recently. The elevator is 30 feet wide and 120 feet high.

It is reported that an elevator will be built between Murdock and Newman, Ill., and that the projectors have been arranging with officials of the C., H. & D. R. R. for a site.

The Lexington Grain Co., of Bloomington, Ill., with \$6,000 capital, has been incorporated to deal in grain and farm produce by Isaac Livingston, A. P. Schantz and L. E. Slick.

The Rogers Grain Co. has sold its elevator at Lexington, Ill., to Bloomington men. Philip Steiner, the manager, has purchased an interest in the lumber and grain business of J. J. Kemp.

The Berrys & Breckenridge Farmers' Grain Co. Berry, Sangamon County, Ill., which recently incorporated with \$5,000 capital, has elected J. J. Waters, president; T. D. Farrell, secretary.

The Buckhart Farmers' Grain Co., of Buckhart, Sangamon County, Ill., with \$2,500 capital, has been incorporated to deal in grain and agricultural implements by S. J. Miller, H. C. Ratz and Mr. Stevens.

The Rogers Grain Co. has sold its elevator and site at McDowell, Ill., to the McDowell Farmers' Elevator Co. This leaves the latter concern in complete control of the elevator business at McDowell.

Articles of incorporation have been filed by Kaga & Co. of Camargo, Ill., with \$2,500 capital, to do a general grain business. The incorporators are Harry C. Kaga, Myrtle M. Kaga and William Trimble.

The Farmers' Grain Co. of Sutler Siding, Sutler Siding, Ill., with \$3,700 capital, has been incorporated to deal in grain, coal, tile, live stock, building material, etc., by C. N. Sutler, Charles Graff and A. I. Brennemann.

Farmers in the vicinity of Coles, Ill., have organized a grain company with \$10,000 capital stock, and an elevator will be erected. The idea is to offer competition to the present elevator concern so that prices may be maintained.

J. A. McCreery has just leased the farmers' elevators at Lincoln and Skelton, Logan County, Ill., and will operate them with Mason City as headquarters. He has also secured a lease of the farmers' elevator at New Holland, Ill.

Articles of incorporation have been filed by the Holcomb-Dutton Lumber Co. of Sycamore, Ill., with \$50,000 capital to manufacture and deal in lumber, grain, coal, tile and other merchandise. The incorporators are George E. Dutton, Arthur H. Holcomb and Sanford A. Holcomb.

The farmers and business men of Downs and Ford Woods, McLean County, Ill., who recently organized the Downs Grain Co., have elected E. J. Sweeney, president and E. B. Lanier, secretary. The capital stock, \$15,000, has all been subscribed. An elevator of 40,000 bushels' capacity is now in course of erection at Downs and one of 30,000 bushels' capacity will be built at Ford Woods.

Secretary I. W. Strong of the Illinois Grain Dealers' Association reports the following recent changes among the grain dealers of Illinois: E. E. Delp Grain Co. succeeds Delp, Ettinger & Co. at Bourbon, Ind., and Philadelphia, Pa.; Rumsey, Moore & Co. succeed Moseman Grain Co., at Peoria, Ill.; Miller-Graves Grain & Lumber Co. succeed Miller & Graves at Duncan, Ill.; Dickinson & Lewis

succeed A. O. Anderson at Lee, Ill.; Turner Bros. succeed W. R. Messereau at Mansfield, Ill.; F. K. Thayer succeeds Oscar Jones at Chrisman, Ill.; G. B. and C. M. Griffin succeed George B. Griffin at Charleston, Ill.; Watseka Farmers' Grain Co. succeeds Rose & Jakle at Watseka, Ill.; John Hesselbacker succeeds N. A. Gault, only dealer, at Elizabeth, Ill.; Bunyan & Evans succeed Wm. H. Suffern Grain Co. at Hammond, Ill.; Palmer & McKee succeed J. P. M. Harrison at Ashley, Ill.; Wright's Switch Grain Co. (mail Mattoon) succeeds W. L. Majors at Wright's Switch, Ill.; Shellabarger Elevator Co. succeeds Majors & Wright at Coles, Ill.; Hitch & Kirk succeed Rising & Murray at Bondville, Ill.; J. V. Shaughnessy succeeds Frank McCormick at Marseilles, Ill.

EASTERN.

B. D. Ruggles has started a grain business at Sutton, Vt.

William H. Knox of Madbury, N. H., has engaged in the grain business at Dover, N. H.

W. N. Potter & Sons have taken possession of their new grain store in Greenfield, Mass.

Elmer Sprague, station agent at Wentworth, N. H., is to erect a store for grain and flour at that place.

James Morgan, postmaster at Canterbury Plains, Windham County, Conn., has his new grain building about completed.

A building which is being erected in Lee, Mass., will be leased by William Parlett and he will engage in the grain business.

R. F. Gregg, a Marlow (N. H.) miller, has purchased a 45-horse power boiler and 35-horse power engine from Madden & Trumbull, grain dealers of White River Junction, Vt.

John Morrison, a grocer of Winnisquam, Belknap County, N. H., has purchased the grain business of C. E. Cate at Sanbornton Bay, same county, and will conduct a combination grocery and grain store.

The new Wheeler Elevator in Buffalo, N. Y., which was recently completed, is now in operation. It is built of concrete and has a capacity of 750,000 bushels. The concern now controls four elevators.

Work on the big grain elevators for the Shredded Wheat Co. at Niagara Falls, N. Y., is progressing rapidly. They will have a capacity of 50,000 bushels each. They will be eighty feet high and have a diameter of forty-five feet.

The Tidewater Grain Co. of New York City, with \$40,000 capital stock, has been incorporated to buy and sell any and all kinds of grain, flour, feed, etc., by K. Stephens, W. W. Howe, Brooklyn, and H. N. Witting, New York City.

The United Ice & Coal Co. has completed its new elevator in Steelton, Pa. Work of remodeling the office is now under way and a new scale, with twice the capacity of the old one, will be installed. The new elevator has a capacity of 12,000 bushels.

The Anderson-Jones Co., dealers in grain, feed, flour, etc., at York, Pa., has been dissolved by mutual consent. G. G. Jones, who withdraws, will in the near future move to the mill which he recently purchased from J. E. Slyder at Seitzville, Shrewsbury Township, Pa., where he will be personally in charge.

The Mansfield Milling Co., successor to E. F. Wilbur & Son, Mansfield, Mass., has commenced the erection of two large buildings, one a steel elevator 60 feet high, the other a three-story warehouse. The elevator will have a capacity of 40,000 bushels. The total capacity of the two structures will be 75,000 bushels. The buildings will probably be completed by February 1.

OHIO, INDIANA AND MICHIGAN.

Construction work on the Bowers-Niblick Elevator at Decatur, Ind., is progressing rapidly.

The Mason Elevator Co. of Mason, Mich., is installing two motors, one of 20-horse power, the other 4-horse power.

Bert Lowe has rented the Lowe Elevator at Monticello, Ind., to Loughry Bros. and will engage in other business.

The Galveston Grain Co. of Galveston, Ind., has sold one of its elevators to the Urmston Grain Co. of Tipton, Ind.

The Toledo & Wabash Elevator Co. offers its grain elevator, Wabash No. 5, with a capacity of 1,500,000 bushels at Toledo, Ohio, for sale.

The Callahand & Neff Co., grain dealers of Canfield, Ohio, have been incorporated with \$10,000 capital by Irwin Callahand, C. H., C. C., R. J., Sadie C. and Melva Neff.

Notice of the formation of the Worthington Grain Co. of Worthington, Ind., has been filed. The partnership comprises Harry H. Stahl, William P. Ballard and E. Byrd Squire.

The Farmers' Educational and Co-operative Union of America Elevator Co. has been organized at Vincennes, Ind., with \$20,000 capital stock. The purpose is to build elevators and cribs at Wheatland and handle grain and live stock in Knox County.

W. W. Myers of Wheatland is president and E. M. Smith of Wheatland secretary-treasurer.

Articles of incorporation have been filed by the People's Grain Co. of North Judson, Ind., with \$5,000 capital stock. The directors are W. F. Marguard, P. H. McCormick and C. A. McCormick.

Jordan & Conarroe of Indianapolis, Ind., have purchased the Pennsylvania Transfer Elevator on the J. M. & I. and Belt Railway, Indianapolis, and will operate it in connection with their regular grain business.

Grain elevator firms and farming implement dealers in Moulton and New Knoxville, Ohio, have consolidated under the name of Detjen-Kattman Co. The New Knoxville Elevator is in course of erection. Henry Detjen and Louis Kattman are the leading stockholders.

Articles of incorporation have been filed by the Hometown Grain Co. of Hometown, Ind., and the Berne Hay & Grain Co. of Berne, Ind. The directors are Dr. Frank Greenwell, Charles Tilden and Charles Bleke of Hometown and C. L. Egly and D. C. Welty of Berne. It is the intention of the new concern to take over the elevator of the Berne Hay & Grain Co. and do a general business in the purchase and sale of grain and grain products at that place.

IOWA.

E. B. Glenn has sold his elevator at Maynard, Iowa, to Nels Enge, of Minneapolis.

The W. N. Klaus Co. has purchased a Hall Signaling Grain Distributor for an elevator at Akron, Iowa.

John Frerichs will equip his elevator at Holland, Iowa, with an improved Hall Signaling Grain Distributor.

The Frerichs Elevator and Coal business at Grundy Center, Iowa, has been sold to John Ontjes and he is now in possession.

The Fiala Bros. have purchased the C. S. King Elevators at Solon and Ely, Iowa. They at present operate an elevator at Solon.

R. B. Lacey, who has been manager of the DeWolf & Wells Elevator at Gillett Grove, Clay County, Iowa, has purchased that concern's elevator at Varina, Iowa.

Construction work on the new Farmers' Elevator at Akron, Iowa, has been commenced. The old structure was destroyed by fire. Changes have been made in the cement foundation for the new building.

The Neola Elevator at Fonda, Iowa, will cease operations as soon as the grain on hand can be disposed of. The reason assigned is that the entrance into the field of the farmers' elevator has made competition too brisk.

MISSOURI, KANSAS AND NEBRASKA.

B. C. Finley is arranging to build an elevator at Tipton, Mo.

J. H. Werner will erect an elevator and flour mill at St. Charles, Mo.

F. W. Scisson is arranging to build a large elevator near Ainsworth, Neb.

The Western Grain & Stock Co. of Weston, Neb., have purchased a Hall Signaling Grain Distributor.

The Trans-Mississippi Grain Co. of Kearney, Neb., will install a Hall Signaling Grain Distributor.

The Bushton Grain & Supply Co. of Bushton, Kan., has increased its capital stock from \$3,000 to \$6,000.

A Hall Signaling Grain Distributor will be installed by Merriam H. Holmquist Co., at Omaha, Neb.

The owners of the elevator at Clare, Johnson County, Kan., contemplate installing a dump and sheller.

Van Buren & Son, who have been conducting an elevator at Fairbury, Neb., have finished installing machinery for a flour mill at that place.

John Erickson has sold his elevator at Stromsburg, Polk County, Neb., to the T. B. Hord Grain Co., of Central City, Neb. The latter assumed control January 1.

It was erroneously reported that the Farmers' Elevator Co. had abandoned plans for the erection of an elevator at Germantown, Brown County, Kan. They will build.

The new elevator which will be operated by Thurman J. Bixler at Hutchinson, Kan., has been completed. It is forty feet high and has a capacity of 5,000 bushels; cost, \$2,700.

The contract for the new farmers' elevator at Sterling, Kan., has been let and construction work will soon be commenced. It will have a capacity of 20,000 bushels, and will cost \$4,200. It will be completed about March 1.

The Lincoln Grain Co. of Lincoln, Neb., has purchased six elevators in south-central Nebraska of the Ewart Co., with an average capacity of 12,000 to 15,000 bushels. This gives the Lincoln Company 25 local elevators in the South Platte country, with a combined capacity of 400,000 bushels. Five of the elevators recently purchased are at DeWitt and

Tobias, Saline County, Neb., and Helvey, Kesterson and Powell, Jefferson County, Neb.

H. S. Fisk has purchased land from the Missouri-Pacific Railroad and has begun the erection of an elevator at LaCrosse, Kan. The structure is to be 26x26 feet and 40 ft. high. It is reported another elevator will be erected in LaCrosse in the spring.

The Davis Elevator, which has been operated in North Topeka, Kan., for many years, is about to be abandoned by the Midland Milling Co., which holds the lease. It is understood that farmers in the northern part of Shawnee County may get control of the elevator.

The Independent Grain & Commission Co., of Wichita, Kan., will henceforth be known as the Independent Grain Co. A new member has been taken in in the person of J. F. Jones, who was associated with his father for many years in the banking business at Pratt, Kan.

J. E. Winterscheidt has sold his elevator, home and other property at Germantown, Brown County, Kan., to James Curtis and Len Roberts, both of Denton, Kan. The value of all the property is about \$20,000. Mr. Winterscheidt will make his home in St. Mary's, Kan.

The Farmers' Elevator Co. has been organized at Dundee, Kan., with \$12,500 capital. Frank Spaniol is president, Martin Keenan, vice-president, Robert McMullen, secretary, and Tobias Unruh, treasurer. The concern has purchased the Rock Grain Co.'s site and building and will tear down the present structure and rebuild an up-to-date plant with a capacity of 50,000 bushels.

SOUTHERN AND SOUTHWESTERN.

The Berryville Milling Co. of Berryville, Ark., will erect a 25,000-bushel elevator.

A certificate of dissolution has been filed by the Uplike Grain Co. of Fort Worth, Texas.

O. M. Boyd & Co. have opened a wholesale grain, flour and provision business in Gastonia, N. C.

A certificate of dissolution has been filed by the Wichita Mill & Elevator Co. of Wichita Falls, Texas.

H. B. Horner and J. D. Wrather, comprising the Horner Grain Co., of Union City, Tenn., now have quarters in the Walker Building in that city.

The receivers of the T. H. Bunch Co. sold the plant of the bankrupt company of Little Rock, Ark., on December 29 to W. E. Overstreet and associates for \$17,523.

The Hearn Hardware & Grain Co., which was established in Hastings, Okla., in 1903, has been sold to the Block-Miller Hardware & Lumber Co. of Lawton, Okla.

Articles of incorporation have been filed by the Sunset Grain & Elevator Co., of El Paso, Texas, with \$30,000 capital stock, by J. H. Cheatham, James Harrison and Fritz Straugh.

Business men of Beaumont and Seymour, Texas, have acquired the properties of the Seymour Mill, Elevator and Light Co., at Seymour. The property is valued at \$75,000. It is understood the promoters will establish a flour mill at Beaumont.

The trustees in bankruptcy for the Hardy Grain Co., met recently in Union City, Tenn., and sold to the Neil & Shofner Grain Co., of Nashville, Tenn., the highest bidders, the mills and elevators for \$16,800. The office building and fixtures were bought by G. B. Driskill of Union City.

Articles of incorporation have been filed by J. H. Cofer & Co., Inc., Norfolk, Va., with maximum capital of \$50,000 and minimum \$20,000. The object is to engage in the wholesale and retail grain business. J. H. Cofer is president; W. E. Flournoy, vice-president and V. W. Emory, secretary-treasurer.

MINNESOTA AND WISCONSIN.

The Empire Elevator Co. is building a corn crib 8x30 feet adjoining its grain house at Stewart, Minn.

The large elevator near the railroad shops at Wabasha, Minn., which had been in operation a number of years, has been razed.

Farmers in the vicinity of Glencoe, Minn., are considering the proposition of organizing a co-operative company to erect an elevator.

The Farmers' Elevator Co. of Hudson, Wis., with \$8,000 capital stock, has been incorporated by A. G. Buemmele, H. P. Young, C. E. Hunter, J. R. Haddon and W. M. Grant.

Eighty farmers in Palmyra, Harrison, Steen and Johnson Townships, Knox County, Minn., have organized a company to erect an elevator and ship live stock. The capital is \$20,000. The offices will be in Wheatland, Rice County. W. W. Myers is president and E. M. Smith secretary-treasurer.

It has been decided to reorganize the Hendrum Elevator Co., Hendrum, Minn., into a co-operative concern. The old company will sell the house for \$5,500 and about 110 shares of stock will be sold at \$55 a share. Of the money invested in shares, 10 per cent will go to the shareholders and the rest of

the net earnings will be divided pro rata among those who sold grain at the elevator according to the amount sold.

The Bombay Farmers' Mercantile & Elevator Co., of Bombay, Goodhue County, Minn., is arranging to take over the Milwaukee Elevator Co.'s elevator and lumber yard at Bombay, and hereafter conduct its entire business from that place. The capital stock of the concern has been increased to \$10,000.

Building permits to the amount of \$96,000 were issued on December 20 at Minneapolis to the Pillsbury Flour Mills Co. to cover the portion of the work that the concern started last year on its improvements in Southeast Minneapolis, and which will be completed this year. One permit for \$90,000 is for a tile and concrete grain elevator. The elevator will cost between \$225,000 and \$250,000.

The new concrete annex to Elevator S of the Great Northern system at Superior, Wis., represents an expenditure of \$500,000. The new grain house has a storage capacity of 2,250,000 bushels of grain in its 72 large bins and 51 intermediate bins. On Northwestern Dock No. 2 a new unloading rig has been built and other improvements made at a cost of \$100,000. Another unloading rig will be erected during the summer.

The new elevator to be erected by the Pillsbury Flour Mills Co., which will be the largest in Minneapolis, will be of concrete, reinforced with half-inch spirals and sixteen one-inch vertical rods. The back walls will be forty-two inches through, sixteen feet outside diameter, and one hundred feet high. With the working house above, the height will be 200 feet over all. The space between the circular bins will be utilized for grain pockets.

WESTERN.

The elevator which has been in course of erection for Mr. Graham at Mondak, Mont., is about completed.

D. L. Lytle has begun operations in his new elevator on the Northern Pacific tracks at Miles City, Mont.

The Central Elevator Co. of Minneapolis, Minn., is soon to commence the erection of an elevator at Laurel, Mont.

Articles of incorporation have been filed by the Farmers' Elevator Co. of Lanark, Valley County, Mont., with \$7,000 capital stock.

The addition to the M. M. Co. Elevator on the railroad right-of-way at Kalispell, Mont., has been completed. The capacity has been increased to 57,000 bushels.

The Lytle Elevator at Moore, Mont., which was destroyed by fire recently, has been rebuilt and is about ready for operation. The new structure is modern in every respect.

The California and Oregon Grain & Elevator Co. has filed articles of incorporation in Los Angeles, Cal., having \$250,000 capital stock. J. B. Alexander, W. H. Joyce, Samuel Murphy, W. H. Holliday and W. E. Kelley are the directors. Elevators will be established in California, Washington and Oregon.

The Porter-Walton Co., grain and seed merchants, have purchased from A. H. Vogeler, of the Vogeler Seed & Produce Co., property in Salt Lake City, Utah, for \$12,000. It is said that the purchasers intend to erect a large grain warehouse on the site, which is advantageously situated near the new Denver & Rio Grande depot.

It is reported that the Globe Milling Co. of Los Angeles, Cal., will in the near future erect at the water front in San Pedro, Cal., a modern grain elevator and flour mill. It is said a lease has been secured from the Southern Pacific Ry. Co. for several acres of ground. The location is such that the elevator may be reached by all boats entering the harbor and the grain easily hoisted.

Work has been commenced on the reconstruction of the grain and feed warehouse of J. B. Stevens & Co. at Tacoma, Wash., which was destroyed by fire recently. The new plant will be on the former site on the city waterway. When the warehouse was destroyed an addition to the plant was under construction, but most of this was saved. It is probable the addition will be rushed to completion and used until the main warehouse shall have been completed.

The Pacific Milling & Elevator Co. will commence the erection of a dock, elevator and flour mill to cost \$500,000 in Portland, Ore. The site consists of four acres. The elevator will be of concrete and will have a capacity of 500,000 bushels of wheat. The mill will have a capacity of 500 barrels a day. The dock will be 440 feet long and 366 feet back from the river front. President G. L. Campbell states that a line of steamers will be run between Portland and Los Angeles. The stockholders include a large number of farmers, merchants and business men in Oregon, Washington and Idaho. The company was incorporated November 18, 1909 by G. L. Campbell, I. G. Sanford, Charles P. Doe, D. G. Leitch, H. B. Henley, W. C. Ripley and W. W. Richardson. The concern will also build a concrete

elevator on the water front at Los Angeles, and one at Port Costa, Cal.

THE DAKOTAS.

The Equity Elevator at New Rockford, N. D., is about completed.

There is agitation for a farmers' elevator at Elrod, Clark County, S. D.

The Farmers' Elevator at Brinsmade, N. D., may be converted into an equity elevator.

A grain elevator is to be erected in Medora, Billings County, N. D., in the spring.

A new engine has been installed in the plant of the Farmers' Elevator Co. at Canton, S. D.

It is understood that John Kingston has purchased the Western Elevator at Hitchcock, S. D.

The elevator of the Reinhart Estate at White Rock, S. D., is now the property of the United Grain Co.

Jacob Kiesz has purchased the elevator at Eureka, S. D., from Stickel & Mettler for \$5,500. He assumed charge January 1.

Construction work on the Western Elevator at Mott, N. D., is progressing rapidly. It will have a capacity of 50,000 bushels.

The Knox Grain Co., of Oakes, N. D., has been incorporated with \$50,000 capital by E. J. Walton, C. E. Knox and M. L. Walton, all of Oakes.

There is agitation for a farmers' cooperative elevator at Hannah, N. D. If an elevator cannot be purchased it is likely that one will be erected.

The Lamoure Grain Co. was launched at Lamoure, N. D., recently by A. H. Johnson and J. S. Emerson. The concern has purchased the Monarch Elevator at that point.

A. R. M., Jacob and D. R. M. Hofer, G. G. Stahl and Frank Baily have bought elevators at Dolton, Turner County, S. D., and Worthing, Lincoln County, S. D.

F. L. Wheeler has completed his elevator at the new town of Nyberg, between Scotland and Tyndall, S. D., and it is now in operation. It has a capacity of 20,000 bushels and will be in charge of Jacob Berreth, Jr.

The first elevator for Mott, N. D., known as the Columbia Elevator, was formally opened for business recently. On the opening day 1,400 bushels of wheat were received. The structure has a capacity of 30,000 bushels.

At a recent meeting of the Farmers' Elevator Co. at Taylor, N. D., it was voted to increase the capital stock from \$10,000 to \$20,000. Farm machinery will be handled in the future. There are eighty stockholders.

Jacob and Chris Bieber of Eureka, S. D., have purchased the 20,000 bushel elevator, coal sheds, residence property and town lots of H. A. Gross at Larvik, Emmons County, N. D. They will take over the grain business on February 1 with Chris Bieber as manager.

Farmers in the vicinity of Plana, Brown County, S. D., have organized to acquire an elevator at that point. Robert Owens was elected president and T. E. Williams, secretary. It is proposed to capitalize at \$5,000 or \$6,000. If an elevator can not be purchased one will be erected.

The Flandreau Elevator Co. has been organized at Flandreau, S. D., and the Dings Elevator has been purchased. The members of the new concern are Jesse A. Smith, J. P. Tenold, H. A. Booth, G. E. Pettigrew, Chris Braake, W. F. McClelland and Ira F. Blewett. Chris Braake has been appointed manager. The elevator is now open for business.

Rapid progress is being made in the erection of the elevator for David Couttes at Belfield, N. D. The engine house has been completed and a teuhorse power engine installed. The elevator will be 30x33 feet ground area and 51 feet to the top of the crib. It will be 81 feet high. There will be an annex or flour shed, 12x30x14 feet. A feed mill will also be installed.

CANADIAN.

The Imperial Elevator Co. of Calgary, Alta., has bought an elevator at Didsbury, Alta., from C. Hiebert.

James Richardson & Sons, of Kingston, Ont., grain merchants, have converted their business into a joint stock company with \$750,000 capital.

It is reported that the Canadian Northern Quebec Railway, whose elevator was recently destroyed by fire at Quebec, Que., will rebuild at Cape Rouge, Que.

It is reported that the Harbor Commissioners at Montreal, Que., are contemplating an extension or enlargement of the grain holding capacity of their elevators. A large quantity of wheat is being held in the west and it has not yet been decided when it is to be moved.

In order to increase its capacity to 500,000 bushels the Goderich Elevator & Transit Co. will erect a cement and steel annex to its elevator at Goderich, Ont. A by-law is being submitted to the taxpayers for the exemption of the concern's present plant

and the proposed additions from all municipal taxation for ten years from January, 1911.

Work has been begun on the construction of an elevator of 50,000 bushels' capacity at Granum, Alta., by the Vancouver Milling Co. This will make five elevators at that point.

[For the "American Elevator and Grain Trade."]

THE GRAIN NEWS OF TOLEDO AND OHIO.

BY E. F. BAKER.

The year 1909, while in some respects not as heavy as the preceding year, has proven very satisfactory on the whole. Total wheat receipts for the 12 months amounted to 4,364,000 bushels as against 4,457,200 bushels in 1908. Corn receipts fell considerable below the preceding year, having been 3,709,600 bushels as against 5,429,200 bushels. Oats receipts were also short, having been 3,289,300 bushels as compared with 3,767,500 bushels. Farmers are still selling wheat very hesitatingly, but there has been a sufficient amount to satisfy all needs of the mills, which are operating at less than half capacity. There is on hand here approximately 950,000 bushels of wheat at this time. There has been an unusually strong call for spring wheat by the scattered mills of the state, and from three to five cars a day have been shipped out to supply these needs.

The quality of corn coming in here is not of the best, and for the past week or two the moisture tests have shown more dampness than for some time previous. This is due to the fact that farmers are marketing their corn from the fields and holding the supply in cribs for future sale. Out of 88 cars recently reported but 12 graded No. 3, while 64 graded No. 4 and nine sample. It is expected that the quality will improve from this time on. There is now on hand here approximately 200,000 bushels.

The local supply of oats has increased recently a trifle with about 110,000 bushels on hand. The quality is first-class.

The Toledo Produce Exchange held its annual meeting for the election of officers on January 3 and selected the following for the ensuing year: President, Edwin L. Camp; first vice-president, Fred W. Jaeger; second vice-president, Wm. W. Cummings; treasurer, Charles S. Burge; secretary, Archibald Gassaway; directors—Frank I. King, David Anderson, John Wickenheiser, Fred O. Paddock, Cyrus S. Coup, W. H. Morehouse, E. L. Southworth, James E. Rundell, Frederick Reynolds, Henry L. Goemann; committee of arbitration—Fred Mayer, W. H. Haskell, J. W. Young, Geo. J. Rudd, W. E. Thompkins, H. D. Raddatz, K. D. Keilholtz; committee of appeals—J. C. Keller, A. W. Bunce, W. E. Stone, W. E. Cratz, F. W. Rundell, R. L. Burge, R. P. Lipe, H. R. DeVore, F. R. Moorman, J. H. Taylor and G. G. Major.

The newly elected president has been a prominent factor in the organization for years and is especially fitted for the place because of his comprehensive knowledge of the grain and milling business, together with his executive ability and natural activity. He has been prominently identified with other clubs and organizations, including the Transportation Club.

Following the election Mr. Camp gave a dinner to about 50 members of the organization at the Secor Hotel. The dinner consisted of seven courses, and David Anderson, president of the National Milling Co., presided as toastmaster. Each guest of the occasion was presented with a handsome souvenir by the hotel management in the form of a watch fob showing a bas relief picture of the hotel on a background of gold.

Toledo grain men were well represented at the recent meeting of the Ohio Millers' State Association at the Great Southern in Columbus, recently. David Anderson, president of the National Milling Co., of Toledo, was present and gave a talk on wheat quality, and A. Mennell discussed his central system. E. L. Southworth, Cyrus S. Coup, E. Ned Crumbaugh and Fred Mayer were also present. Following is the address delivered on the occasion by Mr. Mennell:

"On several occasions during the year 1909 the question has been discussed in millers' meetings as to what should be done to establish uniform rates on flour packages. I have given this matter some attention for several years and I am strongly of the opinion that we should ask congress to establish the decimal system, not only on flour, but also on wheat and other grains, flour to be sold on the basis of 200 pounds to the barrel, with fractional parts of 100 pounds, 50 pounds, 25 pounds, 10 pounds and 2½ pounds. Some states have legislated 192 pounds as a barrel for flour in sacks, while most states specify 196 pounds to the barrel. There is no good reason for recognizing either one as a standard for flour, when a 200-pound basis is much more comprehensive and does away with all short-weight packages, born out of fractional parts of a barrel, when the standard is 196 pounds.

Not only should flour be sold as indicated above,

but wheat and other grains should be bought and sold at a price per 100 pounds instead of a bushel. A bushel has no meaning whatever to any one handling wheat. When a farmer has his wheat threshed, he pays for the number of bushels ascertained by measurement, which is in every case a very incorrect way of reckoning. If this wheat should weigh 62 pounds to the bushel, he raised more wheat than he figured from the threshermen's calculations; if on the other hand his wheat is of inferior quality, testing, say from 52 to 53 pounds to the bushel, he finds, on marketing the wheat, that he has many bushels less than he paid the threshermen for, and not infrequently the farmer blames the country grain dealer or the miller for a discrepancy in weights, due entirely to the measuring in one case and weighing in the other. The use of the bushel is an absurdity when applied to ear corn, as is the case in many parts of Ohio. Of new corn it takes as much as 80 pounds to make a bushel, according to moisture contents, while 69 pounds of dry ear corn will easily shell out a bushel of 56 pounds. Fortunately most sections of Ohio now buy ear corn on a 100-lb. basis, which is proper and wheat should be handled in the same way.

Inasmuch as the decimal system is now used for weights, wherever there are fractions of a unit, there is no reason why it should not be adopted as a basis for handling grain and grain products. I hope the millers of Ohio will go on record as favoring the decimal system in the handling of wheat and flour. It will materially simplify all book records and will in the long run be more satisfactory to the miller, the dealer and the consumer."

The branch school of the Ohio State Agricultural College will be held at Bowling Green, O., the week of January 31.

A state agricultural extension school will be held at Defiance, Ohio, January 17-22. State instructors will be in attendance.

Louis Mennell, of the Isaac Harter Milling Co., accompanied by his wife, have just returned from a pleasure trip to Cuba.

E. B. Straugh and E. S. Harmeyer have opened a commission house in the Ohio Building, Toledo, and will deal in hay, grain and straw.

Fred Jaeger of the J. F. Zahm Co., spent a portion of last week at Cleveland where he was called by the illness of his father, Godfrey Jaeger.

Owing to defective electric light wiring the Royce grist mill, on South Main street, Bowling Green, O., narrowly escaped destruction by fire a short time ago. Some clothing was set on fire by the wires but it was discovered before any damage was done.

"The farmer's corn crib is his bank and he never sells any unless he needs a little ready money," said E. F. Hensen, of Wauseon, while on the 'change floor recently. "I never saw the time when farmers appeared less anxious to market their products."

Word comes from Festoria that the grist mill of A. J. Shonts & Son, at Kansas, was destroyed by fire a few nights ago. The loss was estimated at from \$4,000 to \$5,000. The mill occupied an isolated position and the fire was not discovered until it had made considerable headway.

Announcement was recently made that the railroads will advance rates on grain between Chicago and New York one-half per cent per 100 pounds February 1. Traffic officials declare that the advance on grain has nothing to do with a movement for a general increase in freight rates.

Henry L. Goemann and F. O. Paddock have been delegated to represent the Produce Exchange at a hearing of grain interests at Washington before the Interstate Commerce Commission on January 14 on the question of milling-in-transit rules. The subject is of special interest to Toledo on account of its standing as a terminal market.

"Corn is 50 per cent better," said J. D. Spangler, of Defiance County, a few days ago. "Wheat fields are frozen down to the ground but so far the stems have not been harmed. If we have favorable weather in March, we will be reasonably sure of a good wheat crop as the acreage is large. Clover is in splendid condition but will be governed by the same factors applying to wheat."

The Evans Hay, Grain and Seed Co., of Tiffin, is arranging to remove to Toledo. Application for membership on the Produce Exchange has been made by Harold W. Bell, a member of the company and a prominent Toledo grain man, who will be actively connected with the new offices of the company when opened in Toledo. The company has a hay station near Rossford, O.

Kenton D. Keilholtz, who for the past eight years has been connected with the E. L. Southworth Co., of which E. L. Southworth has been the sole owner, was taken into partnership in the firm a few days ago. Mr. Keilholtz has been a member of the Produce Exchange for five years, at one time being the youngest member of the organization. He is one of the most aggressive traders on the floor.

George Watkins, who 25 years ago was prominent in Toledo grain circles, when he was connected with the Watkins-Curtis Grain Co., was recently stricken with paralysis in the lobby of the Palmer House at Chicago. He was removed to his home on Madi-

son street, where he is still in a critical condition. Mr. Watkins went to Chicago from Toledo a quarter of a century ago and at the time of his illness was connected with the firm of E. W. Bailey & Co. He is 60 years of age and prominently connected in Toledo.

Yeggmen broke into the office of the C. L. Maddy Co.'s elevator at Perrysburg, O., one night recently and after prying open the inner strong box of the safe were rewarded by finding just 60 cents in pennies, which was all that the safe contained. The outer door of the safe was unlocked, as it contained no money. Papers were scattered about by the thieves in their wild search for money.

The first week of January the Williams County Agricultural Extension School was held at Bryan. Soil, fertility, farm crops and animal husbandry were the topics discussed. Enrolled in the school were 125 prominent farmers. The school was in charge of C. R. Titlow, of the agricultural department of the O. S. U., and other instructors were W. E. Bear, E. D. Waid and R. L. Shields.

Walter E. Stone, secretary of the Churchill Grain & Seed Co., in speaking of the clover situation has this to say: "If the price of clover seed is held up the remainder of the month, the market may go higher. Farmers want \$10 for everything they have, whether off-grade or not, and Toledo people appear to have most of the prime sewed up. Demand is poor, particularly in the east, but inquiries are numerous."

E. G. Graun, of the Sneath-Cunningham Co. of Tiffin, declares that Seneca County did not raise more than half a crop of wheat this year because of drought a year ago last fall. He says that grain and seed business has been paralyzed almost by reluctance of farmers to market their holdings. Seneca County is one of the richest in the state and its farmers are particularly well buttressed financially to play the "holding game."

"Demand for corn has picked up wonderfully," said John Wickenheiser the other day. "I believe that the East is bare of corn. Buyers who have been holding off in hopes of lower prices have about decided to make their purchases at the present levels. Not only is Eastern demand good, but there are many inquiries from nearby points including Southern Michigan, Southern Ohio and Pennsylvania. Feeding has become more general since the beginning of cold weather."

F. J. Beasley, proprietor of the Amesville Flour Mill at Amesville, Athens County, was in Toledo recently and gave out the following interview on conditions in his home county: "Growing wheat looks good in Southern Ohio. We had a good-sized crop of fine wheat this season and but little was damaged by bad weather. We raise just about enough wheat in our district for milling requirements, but only half enough corn is grown in Athens County, making it necessary to ship in from other parts of the country for feeding."

The Oregonia Merchant Mills, large flouring mills at Oregonia, O., were destroyed by fire recently, entailing a loss of \$25,000. The loss is but partially covered by insurance. The fire occurred on the eve of the mill's changing hands, W. E. Schwartz, of Clarksville, Tex., having purchased it from J. K. Spencer and Charles Monroe. The cold weather made it almost impossible to check the flames, and for a time the entire village was threatened. The fire is thought to be of incendiary origin although no clue to the miscreants has been discovered.

H. W. Robison, of Greenspring, O., president of the National Hay Association and of the Ohio Grain Dealers' Association, made a visit to the local Produce Exchange recently. While the question has not been officially decided, it is thought likely that the annual meeting of the Hay Association will be held at Cedar Point. Mr. Robison reports that there will be many meetings of agricultural interests at Columbus early in the new year. On January 10, the directors of the National Hay Association were to meet and decide on the details of the annual convention.

J. W. Bruns, of W. H. Bruns & Co., Woodville, while in Toledo recently gave expression to the following views: "I am far from being a bear on corn. Not only was the stand light in Sandusky County but the yield to the acre was from a quarter to a third less than last year. While now and then a field appears as good as 1908, a close inspection will show fewer ears. It was not uncommon last season to find two ears on a stalk, but such is not the case now and furthermore there are many stalks that did not bear any ears. Growing wheat looks well and clover seed prospects are fair."

In a recent interview N. E. Smith, of Fayette, Fulton County, said: "Farmers want \$1 a hundred for corn. Being well fixed, many growers will see their grain rot in the cribs before they will sell it at prices considered too low. Oats are being held more tightly than ever. Some time ago farmers said that they would sell at 40 cents but when this price was reached and buyers sent out bids, the people with the grain said it was too cold or gave out some other excuse for not coming to market. The long and short of it is that growers are not any more anxious to sell at present prices than when the market was lower."

THE EXCHANGES

The dues for 1910, of the Duluth Board of Trade will be \$60.

The membership of the St. Louis Merchants' Exchange was 1,543 on December 31, last.

The annual election of officers of the Duluth Board of Trade will take place on Jan. 18.

The annual election of officers of the Baltimore Chamber of Commerce will be held on January 31.

The Nashville Grain Exchange will organize a clearing house, having employed W. L. Garrett of Kansas City to perfect the details.

Kansas City commission houses are talking of taking off their hired traveling men and turning over the "hustling" to members of the Board only.

The close of the year was marked by a good demand for Chicago Board of Trade memberships, the price of which advanced to \$2,450 net to the buyer.

The Indianapolis Board of Trade has declared a 1 per cent dividend on common stock, retired \$2,000 of preferred, and carried \$1,000 to the mortuary fund.

James B. Hessong, who for four years had been assistant secretary of the Baltimore Chamber of Commerce has been elected secretary to succeed the late H. A. Wroth.

W. F. Ryan has been suspended from membership in the St. Louis Merchants' Exchange for one year for "failing to furnish names of purchases of grain claimed to have been sold by him."

The floor committee of the Board of Trade notified the telegraph companies that in future they will not be allowed to write messages for grain houses notifying customers at other points that orders have been filled.

The Chicago Board of Trade will be represented at the annual meeting of the National Board of Trade at Washington this month by Vice President J. C. F. Merrill, Secretary George F. Stone and Director S. P. Arnot.

The annual election of the Montreal Board of Trade will take place on January 25. The following nominations have been made: Geo. L. Cairns for president; Jeffrey H. Burland for first vice president; R. Wilson Reford for second vice president; Norman Wright for treasurer.

The board of directors of the Milwaukee Chamber of Commerce has fixed the fee for the supervision of weighing grain from railway cars at 40c per car instead of the former fee of 35c. The fee for the supervision of weighing into railway cars from elevators remains at the former rate, 35c per car.

Retail hay and grain dealers of Boston and vicinity met in the committee room of the Boston Chamber of Commerce on December 17 to discuss the advisability of forming an organization of their own. Nothing conclusive was done at the meeting, but the sentiment in favor of such a move was general.

By an oversight of proof-reading of this column last month, E. P. Peck was elected president of the Omaha Grain Exchange. The fact is the recipient of that honor and responsibility was Frank S. Cowgill, president of the Trans-Mississippi Grain Co. Arthur C. Smith was elected vice-president and A. L. Reid treasurer.

The thanks of this paper are due the management of the Philadelphia Bourse for complimentary ticket entitling the representative of this paper (which is there kept on file) to the privilege of the Bourse for the year 1910. This privilege includes the use of the exchange floor, the newspaper rooms, the Commercial Library and Commercial Club rooms in the gallery.

Prices of memberships on the leading exchanges of the country as compiled from last sales by W. H. Anderson, the membership broker, were: New York Stock Exchange, \$88,000 bid, highest sale \$96,000; New York Cotton, \$20,000; Boston Stock, \$34,000; Chicago Stock, \$3,700 to \$4,200; Minneapolis C. of C., \$3,700; Kansas City, \$2,700; Chicago Board of Trade, \$2,450, last sale.

The New York Produce Exchange "cut out" the horse play on New Year's Eve and instead made up a generous purse (\$7,000 or \$8,000) which was devoted to the purposes of an "East End Entertainment," which consisted in the purchase for and distribution of gifts to the poor of the East Side. There was a band of music and a "voddieville" show, with the distribution of skates, toys and candy, etc., as well as baskets each containing a dinner for the family of the recipient.

The Wichita Grain Exchange has organized a clearing house association: The Exchange at a meeting on December 15 appointed the following temporary directors to arrange for the disposing of stock subscriptions, securing a charter, and completing organization: T. L. Hurd, president of the Red Star Milling Co.; A. R. Clark, of the A. R. Clark Grain Co.; E. M. Flickinger, president of the Tri-State Grain Co.; Alvin Harbour, of the Harbour

Grain Co.; David Heenan, of the David Heenan Co. These will be known as the board of governors. The new organization will be capitalized at \$50,000, one hundred shares at \$500 each.

Christmas on the Board of Trade was marked by many distributions of gifts, cash and otherwise by Commission firms to their employees. The employees of the Board also were quite generally remembered by the members. James Sherrin and Edgar Rose were the recipients of a fat purse collected by the settling clerks, and Tom McMann, who has been in the pit for twenty years, came in for a fifty.

The Chicago Board of Trade has ceased posting special morning cable of wheat prices at Buenos Ayres, experience on December 18 showing that the quotations are misleading and practically worthless. The regular Broomhall quotations will be posted as in the past. The fact is the Buenos Ayers market is composed of a small bunch of traders whose power to rig the quotations for a purpose renders their price making value nil, the actual amount of their daily trading seldom reaching 100,000 bushels.

Permission therefor having been given, the annual "grain battle" took place on the floor of the Philadelphia Commercial Exchange on December 31, but so few members participated, says the Ledger, "it is believed the time-honored custom will be abolished next year. Not more than four members took part in the battle, the combatants having been recruited from the ranks of employees in the Bourse. Spectators crowded the gallery in anticipation of a keen struggle, but in this they were disappointed. The fight was confined within the boundary of the grain men's domain, and none was allowed the privilege of the main floor, as Emil P. Albrecht, secretary of the Bourse, was on hand to see that members on the floor were not molested. Several thousand sample bags of meal, wheat and corn comprised the ammunition of the opposing forces. Many of the members who witnessed the fight from the gallery declared that the one-time younger element was now getting older and more sedate, and that a vaudeville show would probably be substituted at the close of 1910."

At the final meeting of the Board of Trade directory of 1909 the following resolution was adopted by the directors as a token of their appreciation of the work of John A. Bunnell, the retiring president: "Mr. Bunnell has occupied the position of director of the Board for three years and vice president for two years with signal ability. He was chosen without opposition its executive officer for the year 1909. The duties of this high office, oftentimes onerous, exacting, and most delicate, he has discharged with rare judgment and solely in view of the highest interests of the association and the immense and world wide commerce it represents. His presidency has been distinguished by a courageous and an unhesitating loyalty to the principles set forth in the charter of the Board and to the declared objects of the association. As our presiding officer he has never failed to show courteous consideration for the opinions of others without in the least compromising his own conscientious convictions. We sincerely regret the severance of our official relations with President Bunnell, and extend to him our heartfelt good wishes."

The Winnipeg Grain Exchange celebrated the advent of Christmas by a little jolly horse play on December 24. There were Marathon races round the pit by members noted for their weight; there were chariot races, and games of curling with the big brass cuspidors; the building fire alarm was rung, and the volunteer corps dashed in with the hose; the clock was put forward to the serious mystification of "Harry," the guardian of the door, and the chain of the gong disappeared. Staid members with little hair were suddenly deprived of their hats and caps, which made excellent footballs, and there were showers of wheat and confetti. The erstwhile stern chairman of the floor committee was the leader of the revels, and for one long hour the men who have been under stress and strain for months were boys again, and there was no prank dear to the heart of boyhood that they did not play. Amid all the fun there was the usual remembrance of the members of the building staff, and when at a late hour it was mooted that through some oversight no special Christmas treat had been provided for the little children in the Isolation Hospital, hands went into pockets and in a few moments there was a goodly sum provided to meet the case. At 1:15 sharp the market was formally closed, though there had been no trades from 12 o'clock. Shouts of "Merry Christmas" resounded on many sides, and no man waited to make a curb trade, but in three minutes the big trading room was empty and silent. Greetings by wire were received from Calgary, Montreal, New York, Chicago, Duluth and Minneapolis exchanges, and suitable replies were sent by President George Fisher.

KANSAS CITY ELECTION.

The Kansas City Board of Trade has elected the following officers for 1910:

President, C. W. Lonsdale.

Second vice-president, Geo. H. Davis.

Directors, Geo. A. Aylsworth, F. B. Godfrey, T. F. McLiney, B. C. Moore, O. A. Severance, John R. Tomlin.

Arbitration Committee, L. W. Bixler, P. F. Cary, F. P. Chalfant, A. R. Pierson, James Russel.

CHANGES IN EXCHANGE RULES.

The Chicago Board of Trade on January 4 by ballot adopted the following amendments to the Rules:

Changing the transfer fee on memberships from \$25 to \$100; the vote stood 253 for and 170 against.

Providing that deliveries in the hour before the opening of the Board may be made without receipts attached. Carried by a vote of 367 to 53.

Making it possible for directors to require members to dissolve objectionable partnerships or suffer the penalty of expulsion; carried by a vote of 345 to 75.

PHILADELPHIA COMMERCIAL EXCHANGE.

The annual election of officers of the Philadelphia Commercial Exchange will take place on January 25, nominations opening on January 15.

Lines are being drawn between two parties in the Exchange, one headed by S. F. Scattergood, now president of the Exchange, and the other by S. L. McKnight, who has been announced by his friends as a conservative candidate to succeed Mr. Scattergood, who is said to represent the progressives. The issue of the campaign is the Exchange's attitude toward railroads, with which the present administration has been somewhat at war during the past year.

PITTSBURG FLOUR AND GRAIN EXCHANGE DINNER.

The fourth annual banquet of the Pittsburg Grain and Flour Exchange took place on December 14. All the members were on hand. The toastmaster was Capt. Jas. A. Henderson. There were several short, crisp speeches and then a vaudeville entertainment prepared and participated in by W. C. McCullough, John R. Johnston, George Vallowe, Clarence Schwartz, Wm. Leubin, Roy Harper, George Jaegers, J. A. A. Geidel, John Dickson, Joseph Gray, Joseph A. McCaffrey, Charles Culp, Wm. N. Gordon, A. H. Sunshine, John Schmidt and George Flinn.

PEORIA BOARD ELECTION.

The annual election of the Peoria Board of Trade took place on January 10, when the following ticket was elected:

President, B. E. Miles.

Vice-presidents, George Brier and H. I. Battles.

Secretary, John R. Lofgren.

Treasurer, Walter Barker.

Directors: Warren Buckley, S. C. Bartlett, Theo. G. Jacobs, A. G. Tyng, C. C. Miles, T. A. Grier, F. L. Wood, Adolph Woolner, Jr., D. Mowat, F. M. Cole. Committee of Arbitration—two years: John Thode, C. H. Feltman, D. D. Hall; one year, Frank Baker. Committee of appeals—two years: W. W. Dewey, J. K. Macy, F. W. Arnold.

LOUISVILLE BOARD OF TRADE.

On January 10 the Louisville Board of Trade elected the following directors: Harry H. Bingham, E. H. Bowen, Charles Earl Currie, David Hirsch, James M. Johnson, Wible Mapother, C. C. Mengel, W. Garnett Munn, Logan C. Murray, F. C. Nunemacher, J. M. Ryan, John J. Saunders and Marion E. Taylor. The thirteen holdover directors whose terms expire in 1911 are: George L. Danforth, A. Brandeis, William Heyburn, C. P. Barton, B. Bernheim, C. M. Bridges, R. A. Peter, Hardy Burton, Sam P. Jones, Clarence Dallam, C. D. Gates, L. H. Wymond and Charles B. Castner.

The directors the next day organized by re-electing the old officers as follows: F. C. Nunemacher, president; George L. Danforth, first vice president; Charles P. Barton, second vice president; Alfred Brandeis, third vice president; William Heyburn, fourth vice president; Logan C. Murray, fifth vice president; Oscar Fenley, treasurer; James F. Buckner, Jr., superintendent and secretary. President Nunemacher will appoint the executive committee, who will arrange the various standing committees.

The annual banquet of the Board took place last evening, January 14.

NEW YORK PRODUCE EXCHANGE.

The New York Produce Exchange on January 3 adopted resolutions to be submitted to the National Board of Trade convention, which meets at Washington on January 25. They were drawn by a committee appointed for the purpose, composed of Welding Ring, president of the Produce Exchange; William H. Douglas, E. R. Carhart, James F. Parker and J. T. Truesdell, chairman. Among the subjects to which chief attention is expected to be devoted are the Federal inspection of grain, the National banking and currency system, improvement of rivers and harbors, with special reference to the extension of piers, and the development of the merchant marine.

The text of the resolutions on the National inspection of grain is as follows:

"Whereas, There is now before Congress a bill to provide for the establishment of a system of Federal inspection of grain throughout the United States; therefore,

"Resolved, That the National Board of Trade declares itself unalterably opposed to such legislation, believing that it would be detrimental to the best interests of both producer and consumer, and would introduce a system that would be impracticable in its operation and lead to unnecessary expense and to serious losses."

CHICAGO BOARD OF TRADE ELECTION.

The annual election of the Chicago Board of Trade took place on January 3, when the following officers were chosen:

President—A. Stamford White.

First Vice-President—(see Rule III) J. C. F. Merrill.

Second Vice-President—Frank M. Bunch.

Directors—(for three years) Albert E. Cross, Alex. O. Mason, Robert E. Tarse, Edward F. Leland, Wm.



A. STAMFORD WHITE.

S. Dillon; (for one year to fill vacancies caused by resignations of Benj. B. Bryan and Harry Boore) Willson H. Perrine, David A. Noyes.

Committee of Appeals—Michael P. Kelly, Horace G. Newhall, Robert W. Carder, Henry M. Paynter and Henry A. Rumsey; (to fill vacancies caused by retirement of Willson H. Perrine and Alexander O. Mason) John R. Mauff and Truman W. Brophy, Jr.

Committee of Arbitration—(two years) Joseph W. Badenoch, Francis L. Schreiner, Francis B. Fox, Arthur S. Jackson and William E. Hudson.

President A. Stamford White has been a member of the Board since 1882. He was a director from 1904 to 1907 and has been a member of many important committees. Throughout his membership on the board he has been engaged in the provision export trade and the general commission business. Mr. White is English by nativity, having been born in Liverpool in 1851.

CHANGES IN EXCHANGE MEMBERSHIP.

Chicago.—Sec'y Geo. F. Stone reports the following changes in the membership of the Chicago Board of Trade during December: Admitted, Jno. H. MacMillan, Archibald R. Dennis, Geo. L. Bacon, Moses C. Carnahan, Wm. F. Sieben, Peter S. Theuer; transferred, Estate of W. W. Cargell, H. D. Wetmore, Chas. E. Watson, Wm. F. Wheeler, Edwin Wolfe, W. D. Bennett.

Baltimore.—Sec'y Jas. B. Hessong, secretary of the Baltimore Chamber of Commerce, reports that George A. Pope, jr., of Dennis & Pope, 515 Chamber of Commerce, and John J. Stream and John C. Shaffer of J. C. Shaffer & Co., Chicago, were admitted to membership at the regular meeting of the Board of Directors on December 13, 1909, vice Charles R. Howard, dec'd, Wm. Otis Price and L. H. Wieman, respectively.

Memphis.—The following are new members of the Memphis Merchants' Exchange: Jere C. West, Howell Turner.

Milwaukee.—Sec'y H. A. Plumb reports the following names of new members admitted to membership in the Milwaukee Chamber of Commerce during the month of December, and also a list of the transferred memberships during the same period—towit: New members—W. G. Kellogg, A. M. Kayser, J. W. McGraw, R. M. Labarthe, Walter J. Bush, K. C. Testwuide; transferred memberships—Robert Pringle, J. H. Sprecher, Peter Pobertson, deceased, Jos. Metzl, deceased, H. L. Palmer, de-

ceased, Chas. R. McGinley, R. J. Wirtz, Abbott Lawrence.

Omaha.—Sec'y F. P. Manchester reports that the membership of P. E. Iler in the Omaha Grain Exchange has been purchased by Merriam & Holmquist, to be executed by H. L. Olsen.

San Francisco.—Sec'y T. C. Friedlander reports that the following were elected to membership in the Merchants' Exchange during the month of December, 1909: Wm. C. Keim of Carlisle, Keim & Co., Inc., 321 Merchants' Exchange; James H. Reid of Royal Milling Co. and the Kalespell Flour Mill Co., 257 California St.

Toledo.—Sec'y Archibald Gassaway reports the following changes in membership of the Toledo Produce Exchange: New members—H. W. Bell of the E. E. Evans Co., Tiffin, O., W. R. Hadnett of the Crumbaugh-Kuehn Co., Toledo, on certificate of E. W. V. Kuehn; withdrawals—E. N. Crumbaugh, C. O. Wessendorf.

COUNCIL OF GRAIN EXCHANGES.

The next meeting of the Council of Grain Exchanges of North America will be held at Chicago on Monday, February 7.

Since the November meeting at Chicago, President Arnot and the committee acting with him have been carrying on the work of organization, and as a result President Arnot is able to tell the New Year's Review editor of the Record-Herald that—

"The following grain exchanges have formally voted to become members of the Council of North American Grain Exchanges, which was organized November 15, 1909, and many more of the large exchanges have referred the proposition to the proper committees and will no doubt take favorable action in the very near future:

"Chicago Board of Trade.

"New York Produce Exchange.

"Toledo Produce Exchange.

"Kansas City Board of Trade.

"Omaha Grain Exchange.

"Minneapolis Chamber of Commerce.

"Duluth Board of Trade.

"St. Louis Merchants' Exchange.

"Baltimore Chamber of Commerce.

"Buffalo Corn Exchange.

"Memphis Board of Trade.

"It was expected when this association was organized that not more than twelve or fifteen of the exchanges of the country would join the Council during the first year. It now seems certain that there will be eighteen or more before the next regular meeting, which will be held in Chicago the 7th of February.

"The enthusiasm shown by the different exchanges has been very gratifying to those who were prominent in bringing this organization into existence, and the practical results that will be attained in the near future will be far-reaching. No formal action can be taken by the Council before the February meeting, owing to the fact that, under the plan of organization, it was impossible to know just how many exchanges would officially join the organization. At this meeting a constitution and by-laws will be adopted, a draft of which has already been prepared by the executive committee, and the Council will then be able to get down to business.

"In the meantime, all of the officers of the organization are using their best endeavors to acquaint the different exchanges with the objects and purposes of the organization, with the view of creating a broad and general interest in its objects and purposes."

TRADERS PUNISHED AT CHICAGO.

On December 21 the directory of the Chicago Board of Trade ordered the suspension for one day from Board privileges of Geo. E. Marcy, president of the Armour Grain Co., and James Pettit, president of the Peavey Grain Co., by virtue of the following resolution unanimously adopted:

"In view of the fact that members of this Board have not been disciplined in the past for manipulation of the markets, numerous instances of which have occurred, it is the sense of this directory that, in this instance, the minimum penalty be enforced; therefore,

"Resolved, That James Pettit and George E. Marcy be and hereby are suspended from all privileges of the Board of Trade of the City of Chicago for one day; be it further

"Resolved, That it is the sense of this directory that any future violations will be construed as a grave offense, and our rules governing such offense will be enforced."

The charge before the directory was that September oats were put up to 50c, and closed at 48c on September 30, the market being oversold; and the country hedgers, not anticipating an advance of 6c within a few days, neglected to get their oats here, or to take the advice of their commission men and cover their sales. Complaints were made to the Board of Trade directors that the market had been manipulated, and their finding was the result of the work of a special investigating committee. Messrs. Marcy and Pettit, in their own defense, gave statements to the effect that the congestion in oats at the end of September was due to the failure

of the short sellers to stampede the farmers into rushing enough oats into market to fill the contracts that the short sellers had made. "The prices obtaining on September 30 do not appear to have been extreme in view of current values both at that time and since," it was declared. "The situation was in large part accidental, due to the position of hedges, and there certainly was no thought on the part of myself or of our house of exacting extreme prices of any kind. I assume that the nominal penalty imposed by the directors of the Board of Trade of one day's suspension was intended as a notice to the trade at large that our Exchange favors natural rather than unnatural markets," said Mr. Pettit.

This is the first time in the history of the Board that this penalty has been inflicted.

CHICAGO BOARD OF TRADE CLEARINGS.

Clearings of the Chicago Board of Trade for 1909 show an increase of 16.27 per cent over those of 1908. The total is \$91,232,308.50, as against \$78,539,952, or a gain of \$12,692,355.50. Showings by months last year, with comparisons, were (the first figures being clearings and the second balances):

January	\$ 3,046,568.25	\$ 962,230.68
February	4,377,087.50	1,694,485.38
March	6,493,800.75	2,206,849.81
April	12,100,397.50	4,589,858.60
May	10,091,674.25	3,914,733.17
June	7,373,549.25	2,504,423.60
July	10,001,974.00	3,143,777.62
August	10,158,990.75	3,121,069.66
September	7,165,089.25	2,417,054.86
October	5,659,835.25	1,919,336.98
November	5,978,323.00	1,721,727.93
December	8,785,018.75	3,069,982.26

Total	\$91,232,308.50	\$31,265,530.55
Last year	78,539,952.00	26,667,724.78

TOLEDO PRODUCE EXCHANGE ELECTION.

The annual election of officers of the Toledo Produce Exchange took place on Monday, January 3, and resulted as follows:

President—Edwin L. Camp.

First Vice-President—Fred W. Jaeger.

Second Vice-President—William W. Cummings.

Treasurer—Charles S. Burge.

Secretary—Archibald Gassaway.

Directors—Frank I. King, David Anderson, John Wickenhiser, Fred O. Paddock, Cyrus S. Coup, W. H.



EDWIN L. CAMP.

Morehouse, E. L. Southworth, James E. Rundell, Frederick J. Reynolds, Henry L. Goemann.

Committee of Arbitration—Fred Mayer, W. H. Haskell, J. W. Young, George J. Rudd, W. E. Tompkins, H. D. Raddatz, K. D. Keilholtz.

Committee of Appeals—J. C. Keller, A. W. Bunce, W. E. Stone, W. E. Cratz, F. W. Rundell, R. L. Burge, R. P. Lipe, H. R. DeVore, F. R. Moorman, J. H. Taylor, G. G. Major.

Following the custom of the Exchange, President-elect Camp gave the members of the Exchange a banquet which was greatly enjoyed. David Anderson, a miller, presided as toastmaster.

Edwin L. Camp is one of the younger generation that has become a factor in the affairs of the Produce Exchange. Though one of the youngest leaders the Exchange has ever had, his comprehensive knowledge of the grain and milling business is said to be combined with natural enthusiasm and executive ability, especially fitting him for the

place. He has been prominently identified with affairs of the Transportation Club and other organizations outside the grain and milling business for a number of years.

NORFOLK BOARD OF TRADE.

In view of the resumption of export grain business by Norfolk and Newport News, suspended for several years owing to rejection of Norfolk inspection certificates by English corn exchanges which have again made the certificates regular, the Norfolk Board of Trade on December 14 adopted the Grain Dealers' National Association Uniform Grade Rules, except as to corn.

The Board adopted also the recommendation of the grain and hay committee that grain inspector at Norfolk, J. R. Bonds, shall be paid by the Board of Trade and Business Men's Association for such work as he may perform, making Mr. Bond the official inspector of the Board.

It was further ordered that members of the grain and hay committee shall visit the export elevator from time to time to see that the work of inspection is properly performed; and a moisture testing machine should be bought for the use of the inspector.

The charge for inspection of outward bound grain has been fixed at 30 cents for 1,000 bushels; for inspecting inbound grain at 50 cents per 1,000 bushels, and for inspecting a car of grain on the tracks, 50 cents. The published rates of the Norfolk and Western Railway Co., owners of the elevator, are: for receiving and storing grain, 40 days or less, three-fourths of one cent per bushel, and for five days additional storage, one-eighth of one cent per bushel.

[For the "American Elevator and Grain Trade."]

ST. LOUIS GRAIN AND FLOUR NOTES.

BY L. C. BREED.

The officers of the St. Louis Merchants' Exchange would doubtless be very glad to pay a substantial reward for the party who would "show them" (they are in Missouri) where the leak is through which some, if not all, the St. Louis "shops" obtain their grain quotations; since all their efforts to locate it have thus far proved to be unsuccessful. They sometimes think that they are "onto it" and plug the hole, only to find that they were mistaken.

In regard to the case of the Merchants' Stock



MANNING W. COCHRANE.

and Grain Company, a citation was issued December 22, charging contempt of court against this company on complaint of the Chicago Board of Trade, which recently secured an injunction against said concern, restraining it from using its quotations. It is charged that the said company violated the injunction. The Merchants' Stock and Grain Co. was declared to be a bucket shop, November 3, by the U. S. Court and ordered to quit using the Chicago quotations. The Chicago Board of Trade sent Eugene M. Cooney, chief operator, F. L. Schuyler, market reporter, Emory J. Chronester, and George J. Burmeister, operators, to St. Louis to keep watch on this company for the purpose of collecting evidence for the issuance of the writ.

In connection with these legal proceedings, an impromptu but rather warm debate took place on the floor of the Exchange, during trading hours, between E. E. Scharff, president of this body and John T. Milliken, one of the leading members, resulting

from the failure to expel a member of the Exchange on a charge of irregular trading, or "bucket-shopping." Mr. Milliken's point was that as the committee appointed by the directors to investigate the matter reported that they had found Wm. H. Ryan, broker, at 201 North Third Street, who was indicted by a recent grand jury on a charge of conducting a bucket-shop, guilty of irregular trading, it then devolved upon the board of directors to expel said Ryan. The committee's report also stated that a customer of Ryan had asked for and had been refused by Ryan the name of the person who took the other side in a deal in which the customer had dealt with Ryan as a broker. The report further stated that Ryan had also refused this information to the committee; which, they declared, showed he was not conducting his business legitimately as a broker.

At a meeting of the directors the following week, however, Wm. F. Ryan was found guilty of irregular trading, thus violating the rules of the Exchange, and in consequence he was suspended from membership in the Exchange until December 27, 1910. This action of the board was considered a victory for Mr. Milliken and his supporters, in that it forced the issue and secured action, in the place of the disposition to procrastinate regarding the disposal of the Ryan matter. Some members are still dissatisfied with the action of the board and think Ryan's expulsion should have been voted.

The board of directors voted, just prior to the close of the year, to increase the annual dues from \$40 to \$50.

At the caucus for the nomination of officers for the ensuing year H. J. Brady caused a ripple of excitement by presenting a resolution reading as follows: "Resolved, That it is the sense of this caucus that the action of the board of directors in increasing the membership dues is not approved." The resolution had scarcely been read and had not been seconded when a member moved to table it. It was tabled without a negative vote.

Robert M. Fulton, former postoffice inspector and now a practicing lawyer, was appointed special examiner to investigate the citation for contempt brought against the Merchants' Stock and Grain Company.

A number of the friends of John T. Milliken for awhile sought to induce him to allow his name to be presented as a candidate for the presidency of the Exchange, but Mr. Milliken declined the request on the ground of having too much personal business to look after to admit of giving attention to the duties of the presidency. He suggested S. A. Whitehead of the Nanson Commission Company, but Mr. Whitehead also refused to entertain the nomination for the same reason. This left Manning W. Cochrane without a contestant for the nomination for the presidency.

For the first time in the history of the Merchants' Exchange, confetti throwing was a feature of the annual year's end demonstration, which began at about noon and ended at about 1:30 p. m. Footballs and confetti flew about furiously, and it was about the "roughest house" witnessed in a decade. Even staid members joined in the fray and some of the officers, including the prospective president, M. W. Cochrane, former president Edward Devoy and even the dignified secretary, Geo. H. Morgan, were seen as combatants, all of whom acted like a crowd of wild school boys out for high jinks!

Seventy-nine members of the Merchants' Exchange and of the "Kernels of Golden Grain," a year-old organization, held high carnival at the Mercantile Club. The occasion was the first annual banquet of the association, and the initiation of six new members. Youth, mingled with gray hairs in the fun of the evening, and elaborate lodge paraphernalia was used to make the night miserable for the unlucky six initiated. John L. Messmore officiated as Tuplotemus, Bert Lang as Liber, Tom Teasdale as Oracle, Edward Flesh as Kromos, Gill Sears as Bacchus, Fred Seele as Plutos and Charlie Niemeyer as Thesnos.

The St. Louis Millers' Club gave a Christmas dinner combined with a "ladies' night" at the Mercantile Club. Geo. J. Tansey, a former president of the Exchange, and F. W. Lehmann, a leading lawyer of St. Louis, were the speakers. Santa Claus also looked in and there was a musical program enjoyed.

It is alleged that owing to the high prices for grain and feed, teamsters are unduly limiting the quantity of feed to their horses. At any rate, the Humane Society of Missouri, hearing of inferior feed being used, and that horses were stinted in their rations, is interesting itself in investigating the matter.

The report comes from Carlinville, Ill., that John Fullington, who resides near that city, has lost five head of horses from spinal meningitis caused by eating frosted corn. The state veterinary says this is the second case of this disease ever known among horses in Illinois. The loss is estimated at \$1,000.

The price of milk, sold by the pint, has been advanced from 4 to 5c in St. Louis. No advance has yet been made in the price of quart bottles and they will continue to be sold at 8 cents. The reason given by dealers is that farmers are demanding a

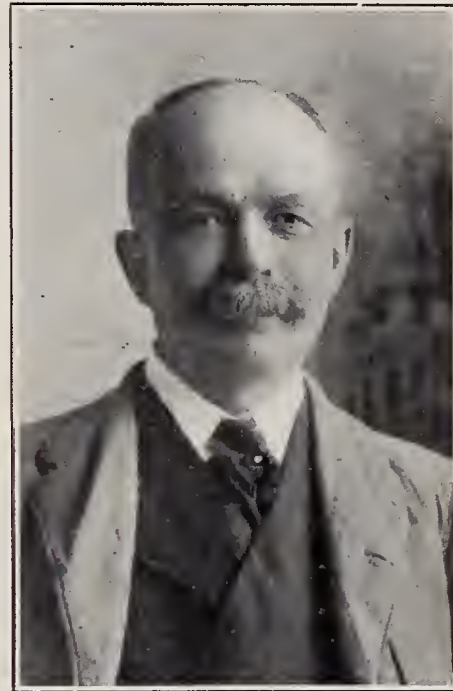
higher price for milk because of the higher cost of corn and other kinds of feed and it is also claimed many farmers are going out of the dairy business.

The Stanard-Tilton Milling Company is preparing to enlarge the capacity of its mill at Alton 400 bbls. per day. The company has just completed a 100,000 bushel wheat elevator, giving a storage capacity at Alton of 300,000 bushels.

Daniel P. Byrne Commission Company has been incorporated, with a capital stock of \$5,000. The incorporators are Daniel P. Byrne, Mary M. McEvoy and Wilbur F. White.

The Corno Mills Company of East St. Louis, certifies to an increase in capital from \$350,000 to \$500,000. The company's warehouse on North Front Street, and feedstuff valued at about \$60,000, were destroyed by fire recently. The building contained a large quantity of alfalfa hay in bales and grain. The origin of the fire is unknown. The building was owned by the Wiggins Ferry Company. An insurance of \$80,000 was carried by the Corno Mills Company.

John Malone, department supervisor and inspector of the Exchange, was crushed between two Burling-



CHRISTIAN BERNET.

ton Railroad grain cars. He was taken to the City Hospital, where it was found he had sustained a badly crushed leg and internal injuries. The accident was occasioned by a switch engine which backed down to couple the cars.

During last month the Exchange suffered the loss by death of two ex-presidents, T. R. Ballard of the Ballard, Messmore Commission Company, and Capt. Isaac M. Mason. Mr. Ballard's death, which took place the first, was the result of having accidentally been run over by an automobile while crossing the street on his way home. Mr. Ballard for many years was active on the Merchants' Exchange. He was born July 12, 1848, in Guernsey County, Ohio. His business career was begun in 1873 as a grain buyer in Central Illinois, where he operated at several points on various railroads. In 1892, he established the firm of Ballard, Messmore & Company in St. Louis. Mr. Ballard of late years had held several public offices in St. Louis.

Capt. Isaac M. Mason was one of the best known citizens of St. Louis. His death came from enlargement of the heart, following an attack of rheumatism. At the age of 19, he became a river captain on the Ohio. He came to St. Louis in 1862, and for many years was engaged in Mississippi River freighting business. In 1905 he was elected city auditor, and afterward engaged to some extent in the mining business. Later on he practically retired from active affairs, but was a daily visitor to the floor of the Exchange. His genial face and pleasant greeting will long be missed by the members, especially the older ones.

At the annual election of the Merchants' Exchange there was but one ticket in the field and in consequence the election passed off quietly. Manning W. Cochrane, who last year served as first vice-president, was elected president. Nat L. Moffitt, was, so to speak, also promoted and became first vice-president. Christian Bernet was elected to the office of second vice-president.

The directors chosen were: Edward E. Scharff, the retiring president; Charles F. Beardsley, William T. Hill, James Garneau, and Parker H. Litchfield.

Committee on Appeals: Daniel P. Byrne, Thomas B. Gettys, Ben S. Lang, W. E. Knapp, L. Hesse, Charles W. Isaacs, F. C. Trauernicht, S. A. Whitehead, J. F. Vincent, George C. Martin, Jr., T. B. Morton, and John O. Ballard.

Committee on Arbitration: F. B. Chamberlain, Samuel Gordon, H. G. Craft, M. J. Connor, Fred W.

Seele, Fred C. Orthwein, Marshall Hall, Martin J. Mullally, Sam Plant, and B. L. Slack.

Manning W. Cochrane, who was elected president, was born at Bushnell, Ill., in 1868. He is the head of the business of the Cochrane Grain Company, which was established at St. Louis in 1903. Thomas Cochrane, father of Manning W., a prominent grain dealer of Lincoln, Neb., is a partner in the St. Louis company.

N. L. Moffitt, first vice-president of the Hubbard & Moffitt Commission Company, was born in St. Louis in 1862. His first connection with the grain business was as an employe of the Venice Elevator Company at East St. Louis. He entered the employ of the Hubbard & Bartlett Commission Company in 1882 and became a member of the Hubbard & Moffitt Commission Company in 1886. Since the year 1883 he has been a member of the Merchants' Exchange. The members of the firm are also members of the Chicago, Minneapolis and Kansas City exchanges. Their business is almost entirely confined to executing orders for grain for future delivery on the St. Louis and other exchanges.

Among the older members of the Exchange few are better known or more popular than Christian Bernet, who has just been honored by the Exchange with the office of second vice-president by "unanimous consent." Mr. Bernet is well qualified to serve in this capacity, having in past years filled several minor offices, leading up to that of member of the board of directors. He has also had long experience as a business man, having for many years been engaged in the wholesale flour business as senior partner of Bernet & Craft. Later on, the firm was reorganized and the Kauffman Flour Mill taken over, the style of the new firm being Bernet, Craft & Kauffman. Mr. Bernet was born in 1850 near Berne, Switzerland, and is endowed with the well-known virtues of that land of industrious and hardy people.

ELEVATORS IN INDIA.

The wheat crop in the United Provinces and Punjab of India, seeded in November, promises to be a "record" one. However, "with the prospect of an addition, on the opening of the new canals in the Punjab, of at least half a million tons of wheat to the average annual export of a million tons, it is strange," says the Calcutta correspondent of the Liverpool Corn Trade News, "that no decision has yet been arrived at on the subject of erecting grain elevators in India. The Commerce and Industry Department is presided over by one whose business instincts are only surpassed by his indefatigable energy; the Commercial Intelligence Department has for its head an officer whose anxiety is to give an impetus to India's trade with home and foreign countries by collecting every possible information for the benefit of the mercantile community and affording all the facilities in his power, notwithstanding the restrictions imposed by the government policy of economy (one might be tempted to say parsimony) in the matter of commerce and industry. In the face of the recommendations of these two eminent men of strong common sense, one would be surprised if the elevator system were not introduced into this country.

"As I said in one of my letters in these columns, the elevator system in India would place our wheat in the European markets in a much better condition than now. It is notorious that our wheat before being shipped out of the country is charged with a considerable admixture of foreign grains, and cleaning elevators, providing, as they do, machinery for cleaning and for separating foreign grains, would benefit the entire trade from the producer to the exporter. Other advantages would surely result, namely, the cheapening and facilitating of handling, safer storage against bad weather and thieves, greater protection from weevil, and to a certain extent easier and more economical railway working."

Chicago's lake receipts of grain in 1909 were 5,555,546 bushels; shipments, 9,247,517 bushels of wheat and 26,734,776 bushels of corn. During the season 6,011 vessels entered that port; total tonnage, 7,672,035.

According to A. F. Hitt, special field agent in Idaho, Oregon and Washington, for the Bureau of Statistics, Idaho holds first place in the production of winter wheat, the average yield being 29 bushels; Washington is second, with 25.9 bushels. Oregon being third, with 21.6 bushels, the general average of the United States being given at 15.5 bushels. Montana heads the list in the production of spring wheat, the average yield being 28.8 bushels; Idaho is second, with 26 bushels, and Washington third, with 20.6 bushels; the general average of the United States being 15.9 bushels. While official figures are not available, it is estimated that the wheat crop in the four states named was near the 65,000,000 bushel mark in 1909, with prices higher than they have been at any time during the last thirty years. The quotations on December 20 were from 87 to 92 cents, but there were also records of sales at prices ranging from 97 cents to \$1.02 a bushel.

COMMISSION

O. H. Patterson & Co., members of the Chicago Board of Trade, failed in December.

W. C. Northern has removed from Batesville, Ark., to Little Rock, where he has engaged in the grain business.

The Evans Hay, Grain & Ice Co. of Tiffin, O., has removed its main office to Toledo. H. W. Bell will represent the company on the Produce Exchange.

Dana Slade, who has been identified with the cash grain business of the Chicago Board of Trade for upwards of fifty years, has retired from active business.

J. C. Shaffer, head of the cash grain firm of J. C. Shaffer & Co., 240 LaSalle Street, Chicago, was recently elected president of the Press Club of Chicago.

W. E. Stacks and W. G. Kellogg have organized the firm of Stacks & Kellogg at Milwaukee, Wis., and will carry on a general grain receiving and shipping business.

E. B. and C. L. Weeks, sons of W. B. Weeks, head of the Weeks Grain Co. of Omaha, Neb., have withdrawn from that firm and engaged in business for themselves.

Pope & Eckhardt Company of Western Union Building, Chicago, wished their friends a Happy and Prosperous New Year in an attractive special announcement.

C. A. Foster, wholesale grain merchant of Pittsburgh, Pa., has issued his yearly calendar with a reproduction of the painting "Elizabeth," by Wm. Thorne, A. N. A.

L. J. Jones, formerly with Langenberg & Co., St. Louis, has become manager of a branch house at 1028 Pierce Building, St. Louis, for E. R. & D. C. Kolp of Fort Worth, Wichita and Oklahoma City.

A. F. Leonhardt & Co., of New Orleans, La., chose for the illustration on a calendar for 1910 an embossed copy of A. Montgomery's painting of a bunch of ears of corn hanging to a nail on the cornshed door.

The Cargill Elevator Company of Minneapolis, Minn., capitalized at \$1,000,000, has filed articles of incorporation to do business in Wisconsin. Charles H. Quackenbush of Green Bay is the Wisconsin representative.

The Nashville brokerage firm of Rouzzer, Sullivan & Co. is now liquidating on account of the recent death of Mr. Sullivan. The other member of the firm, Mr. Rouzzer, has been appointed weighing master for the Nashville Grain Exchange.

The application of L. Ross Fyffe for readmission to membership in the Chicago Board of Trade was recently denied by the directory. Fyffe was a member of the firm of Fyffe, Manson & Co. which failed several years ago with large liabilities, and was expelled from the Board.

"Best Wishes for the Holidays" came from J. F. Zahm & Co., Toledo, Ohio, in the form of a special calendar, together with a pamphlet entitled "Thirty Years." The years included are 1879 to 1909, the time when Mr. Zahm began selling grain and seeds in Toledo to the present.

J. G. Graham, who has been identified with the grain trade of the city of Portland, Ore., for the past twenty years, has engaged in business for himself in room 616, Board of Trade Building. Mr. Graham was for seventeen years connected with Balfour, Guthrie & Co. and for the past year and a half has been assistant manager for the Acme Mills Company.

The season's greetings were sent out with the January, 1910, calendar of The Gale Bros. Co. of Cincinnati, Ohio. There was a new picture by Gutman and the usual verse read as follows:

"Merry Christmas to you and a Happy New Year; May your holiday season be one of good cheer. We wish you good fortune and all sorts of luck. Hope the year 1911 will find you have stuck," to Gale Bros. Co.

Southworth & Co. of Toledo, Ohio, sent out the following announcement the first of the year: "Many things have their beginning with the New Year and with 1910 Southworth & Company make this announcement. Mr. E. L. Southworth, who has been the sole owner of the business, conducted under the name of Southworth & Company, has recognized the faithfulness of one of his employes, Mr. Kenton D. Keilholtz, by taking him into the firm. Mr. Keilholtz has been with Mr. Southworth for eight years, and an active member of the Toledo Produce Exchange for five years. We desire to express our gratitude and appreciation for the business our friends have given us, and sincerely trust we may merit a continuance of these favors. Please accept our best wishes for a Happy and Prosperous New Year."

Consul Walter C. Hamm, at Hull, England, writes that it is reported that there is on foot a scheme to erect large crushing mills at Vancouver, British

Columbia, and Seattle, State of Washington, where the soya bean can be crushed and the oil extracted. The Canadian Pacific and lines of steamers running from Vancouver and Seattle to Japan and China are said to be aiding this scheme. Another project proposed is to erect large factories in Copenhagen for the production of soya-bean oil and cake, the annual turnover of the new company to be \$1,100,000 and 30,000 tons of soya beans will be shipped each year by the East Asiatic Company from Manchuria to Denmark.

[From the Crop Reporter.]

INTERPRETATION OF ESTIMATES OF CONDITION AS EXPRESSED IN PERCENTAGES OF THE NORMAL.

The condition of various crops is estimated periodically during the growing season by the Department of Agriculture. These estimates are expressed in the form of a percentage, the base, or 100 per cent, being termed a "normal" condition.

Three inquiries are often made as to such condition reports, namely: (1) What is a normal condition? (2) What yield is indicated by a normal condition? and (3) What is the method of formula for interpreting a given estimate of condition in terms of indicated production; in other words, with a given condition, how is the indicated production determined?

A normal condition may be defined as a condition that will produce a normal yield, if such condition is maintained until harvest. But what is a normal yield?

Most farmers know from experience approximately what their fields ought to produce, with the usual mode of farming, with normal weather conditions, and without unusual loss from disease, insects, or other injurious influences. A yield under such favorable, though not extraordinary, conditions, would be a normal yield, which is more than an average yield but less than a maximum possible yield. A condition which may produce a normal yield, as thus described, is a normal or 100 per cent, condition.

A normal yield for one farm or section may vary widely from that for another. On one field a normal yield per acre of corn might be 80 bushels, and on another field 12 bushels. A normal yield of corn for one state is more than 40 bushels per acre, for another state it is less than 14 bushels.

The condition of a crop at a given date is expressed by the percentage of a normal yield which may be produced if no change in the condition of status of the crop occur from the given date to the time of harvest. For example, if the condition of the wheat crop on June 1 were such that, with no change in condition—that is, normal influences from that date to harvest—only three-fourths of a normal yield could be expected, the condition would be reported as 75 per cent; if only one-half a normal crop could be expected, the condition would be reported as 50 per cent; if 10 per cent more than a normal yield could be expected, the condition would be reported as 110.

The normal yield of a crop for a state or for the United States may be determined approximately in a practical way by multiplying the average yield per acre for any number of years by 100 and dividing the product by the average, for the same years, of the condition of the crop at or near the time of harvest. For example, the condition of corn is reported the last time as of October 1; if the average condition of the crop on October 1 for the ten years 1899-1908 was 80 per cent, and if the average yield per acre in the ten years 1899-1908 was 28 bushels per acre, it may be assumed that 80 per cent of a normal condition will produce 28 bushels; therefore, by proportion, 100 per cent will be 35 bushels; that is,

$$28 \times 100 \div 80 = 35.$$

An average for five years, instead of ten, or any number of years, may be used for this comparison, but with slightly varying results.

This method can not give a precise equivalent of 100 per cent, because a change sometimes occurs in a crop after the date of the last condition report and before harvest, and also because the data used are estimates and subject to errors of judgment. But for practical purposes the method is valid for obtaining approximations.

A normal yield being known, it is simple process to reduce any given condition figure to its yield equivalent; that is, multiply the normal yield by the condition figure, and divide by 100. For example, if the condition of corn is 80 per cent, where a normal or 100 yield is 35 bushels, the indicated yield would be 80 per cent of 35 bushels, or 28 bushels ($80 \times 35 \div 100$).

The yield obtained by the method thus described is the yield which may be expected providing the condition of the crop does not decline or improve after the date of the estimate. But as a crop advances to maturity some portion of it usually suffers from some damaging influences, causing a decline in condition.

To forecast the probable outcome of a crop on

the basis of the condition at a given date, account is taken of the average change (usually decline) in condition from the given date to the time of harvest; it is assumed that the change in condition to the time of harvest will be the same as an average change. In other words, it is assumed that the probable yield will be in the same ratio to the average yield as the condition of the crop on a given date is to the average condition on that date.

For example, on the basis of a ten-year average, suppose the average condition of corn in the United States on July 1 is 87 per cent, the average yield is 27 hushels. Suppose the condition on July 1 is 75; it is then assumed that the probable yield (?) will be to 27 bushels as 75 is to 87, which is

$$\frac{27 \times 75}{87} = 23.3 \text{ (bushels).}$$

That is, multiply the average yield by the indicated condition at the given date and divide by the average condition on the same date.

The ten-year (1899-1908) average condition and average yield per acre of important crops in the United States on dates indicated is shown as follows:

Crops.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Yield.*
Corn	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 25.8
Wint'r wheat	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 13.9
Spring wheat	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 13.5
Oats	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 29.4
Barley	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 25.8
Rye	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 15.8
Buckwheat	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 18.0
Potatoes	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 89.6
Rice	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 30.9
Hay	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 1.43
Tobacco	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 805.1
Cotton	86.6	86.0	89.5	79.6	84.8	82.6	80.6	79.2 187.7

*Cotton and tobacco, pounds; hay, tons; other products, bushels.

The "normal" yield per acre of various crops for the United States (based upon the ten-year average of the percentage of normal condition of crop at or near the time of harvest and the average yield per acre in the same years) is found to be approximately as follows: Winter wheat, 17.5 bushels; spring wheat, 17.5 bushels; corn, 32.6; oats, 36.8; barley, 30.8; rye, 18.1; buckwheat, 21.8; potatoes, 118.1 bushels; tobacco, 968.8 pounds; cotton, 280.1 pounds; rice, 35.5 bushels; flaxseed, (five-year average), 11.9 bushels.

The "normal" yield of crops per acre, that is, the yield per acre which is expected under normal conditions, is gradually increasing. This is shown by the following comparisons of the equivalent yield per acre of a normal condition at or near harvest, during the decades 1889-1898, 1899-1908, and the average of the five-year period, 1904-1908.

YIELD-PER-ACRE EQUIVALENT OF A NORMAL CONDITION AT OR NEAR TIME OF HARVEST.

Crop.	Decade 1889-1898.	Decade 1899-1908.	Five-year period 1904-1908.
Winter wheat, bushels.....	15.9	17.5	17.9
Spring wheat, bushels.....	16.3	17.5	17.2
Corn, bushels.....	29.9	32.6	32.9
Oats, bushels.....	32.4	36.8	37.2
Barley, bushels.....	27.6	30.8	30.9
Rye, bushels.....	15.8	18.1	18.2
Buckwheat, bushels.....	19.7	21.8	22.1
Potatoes, bushels.....	103.1	118.1	122.7
Tobacco, pounds.....	968.8	968.8	979.4
Cotton, pounds.....	280.1	280.1	271.5
Rice, pounds.....	35.5	35.5	35.1

SOYA BEANS IN AFRICA.

At the close of the business of the African Trade Section of the Liverpool Chamber of Commerce on October 25, A. Grenville Turner delivered an address on the cultivation and uses of the soya bean during the course which he said that,

"It is estimated that this year's crop of soya bean is likely to exceed one million tons. The beans contain about 18 per cent of oil, and it was stated that refined Soya oil fetched today a higher price even than refined cotton seed oil. The soya bean, which is an edible bean, and can be used in the same manner as marrowfat peas, can be utilized for the following purposes: Lamp oil in China, salad oil, ingredient of margarine, manufacture of soap and paint, soya cake and soya meal for cattle, soya meal for making fancy biscuits and ship's biscuits (a tin of fancy biscuits made by Messrs. Carr & Co. from this meal was submitted to the committee by Mr. Turner), soya flour for bread-making (a loaf made from soya flour furnished by Messrs. Joseph Rank, Ltd., Hull, was also submitted). Under the name of coffee beans soya beans are used to some extent in Switzerland as a vegetable, and dried and roasted are also used as a coffee substitute. A sample of coffee specially ground from the soya bean, at the suggestion of Sir Alfred Jones, was submitted, and created much interest.

Mr. Turner further stated that, according to a recent report issued by the Department of Agriculture of the U. S. A., as soya beans contain no starch, they have been recommended for food for people suffering from diabetes.

Sir Alfred Jones stated that Mr. Turner, who had taken a great interest in this product, would proceed to West Africa for the purpose of lecturing at the Calahar Agricultural Show, on the uses of the bean and its products.

IN THE COURTS

Edwin M. Cox has been appointed receiver in bankruptcy for Griggs & Co., Inc., New York City, dealers in hay, grain and feed. The assets are estimated at \$10,000.

F. P. Brockman, grain dealer, St. Louis, has filed voluntary petition in bankruptcy; assets, \$12,776, of which one-half is claimed to be exempt; liabilities, \$27,356, due for grain and handling charges.

Julius Wolfman, a money lender, who was convicted with three others for conspiracy to conceal assets in the bankruptcy case of the Marshall Hay & Grain Co., of East Boston, Mass., in the Conner-Freedman case, was recently fined \$1,000.

Suit has been instituted in Chancery Court at Nashville, Tenn., by N. C. & St. L. Railway and the L. & N. Railway against the McLemore Grain Co., of Nashville to recover judgment for \$204 for each railway said to be due for demurrage charges.

A jury in the Circuit Court at Allegan, Mich., has awarded E. F. Sherman \$7,500 damages against the Lake Shore Railroad Co., for the destruction of his grain elevator, which was fired last July by a spark from a passing locomotive. He sued for \$25,000.

The \$10,100 personal injury suit of Frank McMullen against the Tacoma Grain Co. of Tacoma, Wash., was non-suited recently by Judge Clifford of the Superior Court at that place upon motion of defendant. The court ruled that the evidence did not sustain the allegations of the complaint.

The controversy between the Iron Mountain Ry. Co. and the T. H. Bunch Grain Co., over ownership of the grain elevator in Argenta, Ark., has been settled by the railroad company's paying the receivers of the Bunch Company \$60,000, and in return the latter surrenders all claims against the elevator.

Eugene Purtell, a Chicago broker, has instituted suit in the Circuit Court against Emil W. Wagner, member of the Chicago Board of Trade, claiming \$50,000 damages alleged to have been suffered by him as a result of utterances said to have been made against his business by Mr. Wagner. Particulars are not given.

Mandatory proceedings were begun in the Circuit Court at Chicago on January 10 by William E. Irwin, a receiver's agent for grain dealers, to compel the state's attorney to file quo warranto proceedings questioning the right of W. Scott Cowen, state grain inspector, to do the work with his force that is now being done by receiver's agents.

The Kemper Grain Co. was awarded judgment by consent of \$100.43 by the court at Oskaloosa, Kan., recently against C. Dyson of Ozawie, Kan. Dyson shipped a car of wheat to the complainant and made a draft of \$97 more than the value of the shipment. The complainant had two cars of wheat belonging to Dyson tied up at Kansas City and released these, the latter paying the costs.

An indictment has been returned by the Federal grand jury of the eastern district of Kentucky against the Van Lunen Co., an Ohio corporation, engaged in the hay and grain business in Cincinnati and Covington, Ky. The company is charged with making false reports of weight on ten different shipments of hay from Covington to various points in the south. The initial carrier in each case was the Louisville & Nashville Railroad. Some of the shipments went as far south as Florida. By the underhilling freight rates of from 22 to 27 cents per 100 pounds were avoided on from 2,000 to 10,000 pounds in each of the cars named in the indictment.

The case against Thomas P. Doty, a former employe of the Illinois Central Railroad charged with the embezzlement of 25,000 bushels of grain from the Central Warehouse & Grain Co., was dismissed recently by Judge Chretien in the Criminal District Court at New Orleans, La., at the instance of the District Attorney, because of the unsatisfactory evidence given by the State's witnesses. A statement made by John K. Seagrave, manager for Steinhardt & Co., tended to show that the grain which Doty was charged with embezzling had been legally purchased by the latter concern and had been shipped by it on the steamship "Cuhan." The indictment charged the embezzlement of the corn on the steamer.

After a three days' trial in the District Court at York, Neb., Samuel C. Nelson, an officer of the concern, was found guilty of embezzling \$1,900 belonging to the Alfalfa Milling Co., of that place, and sentenced to five years in the penitentiary. An appeal has been made to the Supreme Court. The trial of George M. Stryber, another officer, on the same charge, has been continued to the next term of court. The Alfalfa Milling Co. was promoted about ten months ago by Granite Security Co. and the Merrill Construction Co., of Kansas City, of which Nelson was an officer. The latter concern was to furnish the building and install the machinery. It was charged that representatives of the Alfalfa Milling Co., paid to the Granite

Security Co., funds which were to be paid to the Merrill Construction Co., on the contract for the purchase of the building and machinery of the Alfalfa Milling Co.

The Alfalfa Meal Co. of Council Bluffs, Iowa, has instituted suit in the District Court at that place against Robert L. Goyer and the Bank of Baton Rouge, La., for \$354.61 on contract for a large amount of refuse molasses it purchased from defendants and alleged to be short in shipments. The petition alleges that Goyer shipped seventeen tank cars of molasses consigned to himself at Council Bluffs. The bills of lading he indorsed and attached to each a sight draft supposed to represent the amount due him after payment of freight on arrival at destination. He deposited the bills of lading in the Bank of Baton Rouge, La. for collection. Plaintiff alleges it was unable to secure the molasses until the drafts and freight were paid.

That S. H. De Long as receiver of the J. P. Barnhouse Grain & Seed Co. is indebted to the defendant in the sum of \$3,638.81 instead of the defendant being indebted to the receiver in the amount of \$6,500 is alleged in the answer and cross petition of J. P. Barnhouse filed in a suit brought against him by the receiver at Marion, Ohio. Barnhouse sets forth that he was manager and treasurer of the J. P. Barnhouse Grain & Seed Co., and admits he sold stock to the company at its par value of \$1,000. Later he sold the property to the company for \$7,000, receiving \$5,350 and notes for \$1,550, leaving a balance of \$100 due him. Barnhouse alleges that in July, 1909, the company was heavily in debt and that he purchased its lumber for \$5,610.09 and transferred \$1,000 in stock. He further alleges the concern failed to take up the notes on which the defendant was security and that he later found it necessary to pay \$1,077.89. He denies that he had possession of the books of the company and alleges that a bookkeeper was employed.

I. C. C. DECISIONS.

Among recent decisions of the Interstate Commerce Commission are several which are interesting to the grain trade, as being rulings on principles.

In Wm. F. Jobbins, Inc., vs. C. & N-W. Ry. Co. et al. complainants applied for a 60,000-lb. capacity car, but two 60,000-lb. capacity cars were furnished in lieu thereof, into which complainants loaded 59,703 lbs. (44,013 lbs. in one and 15,696 in the other) and prepaid the freight; but at destination additional charges (\$95.92) were demanded on basis of the tariff minimum for the two cars. The decision says:

"The facts in this case appear to bring it clearly within the principle announced in Kaye & Carter Lumber Co. vs. Minnesota & International Ry. Co., 16 I. C. C. Rep., 285, in the following language:

"A carload rate and a minimum weight for a car of definite dimensions when lawfully published in the tariffs of a carrier constitute an open offer to the shipping public to move their merchandise on those terms; and it would be wholly unsound in principle to permit the carrier to impose additional transportation charges on the shipper who orders a car of a capacity, length, or dimension specified in its tariffs, simply because it is not provided with cars of the dimensions ordered. Pacific Purchasing Co. v. C. & N-W. Ry. Co., 12 I. C. C. Rep., 549, and General Chemical Co. vs. N. & W. Ry. Co., 15 I. C. C. Rep., 349. We therefore find that the complainant is entitled to reparation.

"The obligation to carry the merchandise of shippers on the basis of the published rates and minimum weights, and to use whatever cars are available for that purpose, ought to have been covered in the published tariffs of the defendants by proper rule to that effect; and their tariffs were unreasonable and unlawful in not containing such a provision at the time these shipments were made. Beggs vs. Wabash R. R. Co., 16 I. C. C. Rep., 208."

"We find that defendants' tariffs were unreasonable and unlawful by reason of their failure to contain a rule similar to that above quoted from Transcontinental Freight Bureau tariff, I. C. C. No. 865, and that by reason of such failure the sum of \$95.92 was unlawfully exacted from complainant."

In S. Y. C. & Linseed Meal Co. vs. M., K. & T. Ry. Co. et al. the Commission says: "A carrier voluntarily establishing a through rate (that is less than the sum of the locals) after a shipment has been made does not *ipso facto* become liable for the difference between the amount charged and the amount which would have been collected if the through rate had been in effect at the time of the movement."

In South Cañon Coal Co. vs. C. & S. Ry. Co. et al. the Commission says: "A rate is not unreasonable simply because a lower rate is in effect via other lines." In this case the higher rate was due to the routing specified by the complainant.

From August 1 to December 10, 1909, 3,191 cars of bonded wheat from Canada went through the Superior elevators.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL.B., of the Chicago Bar.]

Right Retained To Reclaim Wheat.

A farmer residing some miles from a town delivered wheat to a buyer there, with the understanding that it was to be paid for at once. He received therefor a check on a local bank, which he took home with him, it being after banking hours. He did not present the check until his next trip to town, between two and three weeks later, when payment was refused. The buyer had no funds on deposit when the check was drawn, but had an arrangement with the bank under which it paid his checks and took bills of lading on the shipment of grain as security. A week after the issuance of the check, the buyer became insolvent, and the bank attached the wheat. After the dishonor of the check, the seller sued the bank for the value of the wheat. The Supreme Court of Kansas holds (People's Bank of Michigan Valley vs. Brown, 103 Pacific Reporter, 102) that the farmer's failure to make an earlier presentment of the check did not conclusively show a waiver of his right to reclaim the wheat; and affirms a judgment in his favor.

It was of course competent for the farmer and the buyer, the court says, to make any agreement they saw fit as to when the absolute title to the wheat should pass; but, in the absence of anything to indicate the contrary, the transaction between them must be taken to have been the ordinary one of the sale of specific personal property for cash; delivery being made in the expectation of immediate payment. In such a case, the failure of the buyer to pay the purchase price authorizes the seller to reclaim the property. That is to say, when a bargain is completed for the sale of specific personal property for cash and delivery is made, if the buyer fails to pay the price promptly, the seller has a right, as between the parties or against an attaching creditor, to reclaim the property, which is not lost by delay to assert it, unless an intention on his part is shown that the title should pass absolutely; and whether that is the case is ordinarily a question of fact, to be determined in view of all the circumstances.

Passing Title to Oats.

A Texas grain company contracted to sell and deliver to an Arkansas firm two carloads of oats at a stipulated price. On the same day the company caused to be shipped a carload of oats, which was billed to shipper's order. The car was not received by the Arkansas firm, a controversy having arisen concerning the inspection of the oats and later concerning a charge for demurrage. Then the company entered into a contract with one Wilson for the sale of the oats, drew on him for the agreed price, and delivered the draft to a local bank in Texas, with bill of lading indorsed in blank attached. The bank placed to the credit of the grain company on its books the amount of the draft, less a small discount, and the amount was immediately checked out by the grain company. A member of the grain company and also the cashier of the bank testified that the draft, with bill of lading attached, was delivered to the bank as an actual sale for the full amount thereof, less discount, which was the only testimony on that subject.

The day following the delivery of the draft to the bank the Arkansas firm attached the car of oats in an action based on several items of damages claimed against the grain company. On the trial the jury were instructed that if they believed from the evidence that the grain company had contracted and sold the car of oats attached to the Arkansas firm prior to the sale to Wilson and prior to the transfer of the bill of lading to the bank, and that the firm were at all times ready and willing to receive and pay for the oats at contract price, and that the grain company failed and refused to carry out its contract of sale and delivery to the firm without fault on the part of the latter, the company had no right to sell the oats to Wilson, and its draft on him was a nullity, and the transfer of the bill of lading to the bank was a nullity as to the rights of the firm, provided that the bank knew of the sale to the Arkansas firm before the indorsement of the bill of lading to it.

The Supreme Court of Arkansas holds that this instruction was erroneous and should not have been given. It says (Collin County National Bank vs. Harris & Jagers, 119 Southwestern Reporter, 662) that the contract of sale between the grain company and the Arkansas firm was executory (to be performed in the future) and title had not passed. There had been no delivery of the oats, and the contract was for the sale of no particular carload of oats. The title to the specific property remained in the grain company until appropriated to the performance of the contract and delivered in completion of the sale. The assignment of the bill of lading attached to the draft passed the title as collateral security to the bank, where the title re-

mained until the payment of the draft and delivery of the bill of lading. Moreover, the attitude of the firm as attaching creditors in this case was inconsistent with their claim that the title to the car of oats had already passed to them from the grain company at the time of the contract of sale made to Wilson and delivery of the draft with bill of lading attached to the bank.

It was error, too, under the evidence to submit to the jury the question whether or not the title to the property passed to the bank by the delivery of the draft with bill of lading attached, and whether or not this was done for the purpose of aiding the grain company in defrauding creditors.

Under the evidence in this case a verdict should have been directed in favor of the bank.

ARBITRATION DECISIONS.

The mails from the association secretaries have been rich in arbitration decisions during the past thirty days, all of which adjudicate some new features of trade problems. The first is the following from the "supreme court," so to say of the trade, the arbitration committee of the National Association, and is as follows:

The Bassett Grain Co., Indianapolis, Ind., plaintiff, vs. W. H. Merritt & Co., Chicago, Ill., defendants.—[By H. S. Grimes, Chas. C. Miles and E. M. Wasmuth.]—On March 14th, 1906, defendants wrote to plaintiff as follows: "We are sending you today a sample of some mixed oats which we have loaded, and which we can quote to you at 30½ track Indianapolis, or at 32½ track Newport News, for export. Subject to Chicago weights and grades, and draft to be paid when presented. These oats are not inspected, and we are offering them simply by sample. In case you can use any of them, kindly wire us early tomorrow."

On March 16th, defendants wrote to plaintiff as follows: "We have your letter of the 15th [letter not in evidence], and your wire of today, bidding 32 for oats like sample sent you, and we replied that 32½ was the best we could do. We offer you tonight, however, 10 cars, like sample, at 32½, Newport News, for export, subject to being unsold."

On March 17th, defendants wrote to plaintiff as follows: "We confirm our sale to you today of 10 cars of sample mixed oats, at 32 track Newport News, for export. Subject to Costello's approval [Costello is a private inspector at Chicago] and subject to Chicago weights. We ordered these oats shipped out today, as they were loaded on track. The sample that we sent you was taken from these 10 cars, which were loaded at that time, but in view of the fact that Costello did not have your sample, we have had Costello send you today samples of these 10 cars, which you will receive on Monday, and you can compare them yourselves."

On March 17th, plaintiff confirmed to defendants as follows: "We entered purchase from you today, 10 cars of oats, equal to sample furnished us, at 32 cts., track News, for export, 20 days' shipment, subject to Mr. Costello's approval, and are handing him sample today for his guidance. . . . The original sample is going to Mr. Costello today. Please do not ship until same is received."

Evidence shows that Inspector Costello received the sample sent to him by plaintiff. It also shows that Inspector Costello declined to pass the 10 cars of oats as being equal to sample. It further shows that the 10 cars of oats, which were loaded at the time sale was made, had gone forward and that samples from each of these 10 cars had been sent to plaintiff.

Defendants made the customary draft for amount of invoice, with bill of lading attached, which was presented to plaintiff for payment, and was refused by him, on the ground that the oats shipped were not equal to the sample, and that he, the plaintiff, claimed a difference in value of 2 cts. per bushel, on 17,968 bushels, amounting to \$359.36.

Defendants declined to allow this discount, or any other, and plaintiff finally paid the draft under protest, claiming final settlement according to contract terms.

There is no dispute between the litigants as to the terms of the contract.

The plaintiff furnishes sworn evidence to the effect that the sample, put into inspector's hands by him, was the entire original sample furnished by defendants, as representing the oats covered by the transaction.

The defendants state that the sample received by Inspector Costello, from the plaintiff, showed oats of better quality than the one by which sale had been made.

The defendants further shows, by their own evidence, that a part of the original sample, which had been retained in their office, corresponded with the oats shipped, and Inspector Costello also furnishes a certificate to this effect.

The best evidence submitted shows that plaintiff did send the actual sample, on which contract was based, to Inspector Costello, and it is clear from the evidence that the 10 cars did not contain oats of quality equal to sample.

The papers submitted showed, either by inference

or direct statements, that the oats covered by this contract were not of a high grade.

The plaintiff submits no evidence to show the exact character of the original sample by which he made the purchases; neither does he show the character, grade or value of the oats that he actually received on contract.

The evidence shows that plaintiff did not get oats of a quality equal to the sample on which contract was based. We have no means of knowing whether the difference in value amounted to a fraction of a cent or to two cents. The sworn statement of plaintiff to the effect that there was a difference in value of two cents is not in our opinion sufficient evidence on which to base a verdict in his favor for the amount claimed.

Inasmuch, however, as it has been proven that the plaintiff did not receive oats of quality equal to sample by which he bought he is entitled to a verdict in his favor to the amount of a small fraction of a cent, which we conclude should be one-half cent per bushel, on 17,968 bushels, amounting to \$89.84; and judgment for this amount is hereby rendered in favor of the plaintiff. Costs of arbitration to be paid by defendant.

January 8, 1910.

TEXAS ARBITRATION AWARDS.

The following arbitration decisions have been made by the arbitration committee of the Texas Grain Dealers' Association, and are published by Secretary G. J. Gibbs:

E. R. & D. C. Kolp vs. Doggett Grain Company.—[By Messrs. I. Updike, E. W. Rollow and E. W. Crouca.]—[Mr. E. R. Kolp, being disqualified, did not sit in this case, and Mr. I. Updike was appointed arbitrator in his stead.]

This is a case pending before the arbitration committee of the Texas Grain Dealers' Association, wherein E. R. & D. C. Kolp of Fort Worth, Texas, seek to recover from Doggett Grain Company of McKinney, Texas, the sum of \$17.61 for shortage on a car of cane seed. The defendants do not dispute the correctness of the claim, but insist that before payment of same the plaintiffs should furnish a seal record of the car, and this record plaintiffs say they are unable to furnish.

The committee can find no provisions in the Trade Rules of the Texas Grain Dealers' Association requiring seal records to be furnished as requisite for collecting shortage claims, and is therefore compelled to find in favor of the plaintiffs for amount of the claim.

R. E. Robey Grain Co. vs. Updike Grain Company.—[By Messrs. Rollow and Crouch.]—This is a case filed for arbitration before the arbitration committee of the Texas Grain Dealers' Association, wherein the plaintiff seeks to recover from defendant the sum of \$45.29, alleged to be due on the shipment of five cars corn shipped by the Robey Grain Company of Oklahoma City, Okla., to Updike Grain Company at Galveston, Texas, on a contract between the contestants, said contract being dated September 28th, 1908, and which contract stipulated the sale of 5,000 bushels 3 bulk corn to Updike Grain Company, at 72 cents, basis Group One, shipment October 15th, 1908. This contract provided for destination weights and grades, and states on its face for shipment to Galveston; or, rather, in words bears this indorsement: "Same will move to Galveston." The plaintiff admits that a balance is due the Updike Grain Company on another transaction, which has been held pending a settlement of the above filed claim.

Two cars of the corn involved in this claim were shipped from Hastings, Okla.; carried a rate of freight 2 cents per 100 lbs. higher than the Texas Group One rate; that is, the export rate, Hastings to Galveston, is 2 cents greater than the Texas Group One rate; and Updike Grain Company contends for an allowance of this difference in freight; and this appears to be the point in controversy between the contestants.

The committee has carefully examined all the papers and evidence in the case, and is of opinion that under the contract between the parties, the Robey Grain Company was not obligated to furnish the Updike Grain Company corn taking a favorable export rate to Galveston. However, it appears that Robey Grain Company made excessive drafts against the shipments of said corn, and that Updike Grain Company was forced to allow said drafts to be protected in order to protect its interests; this fact caused such delay in Updike Grain Company getting possession of the bills of lading as to prevent Updike Grain Company from making a favorable disposition of the two cars of corn which had been shipped from Hastings, Okla., to Texas domestic points.

We therefore find that Updike Grain Company is entitled to 2 cents per 100 pounds on the two cars shipped from Hastings, Okla., to Galveston, the two cars containing 171,260 pounds, making a difference in freight due \$54.25.

We also find that the Robey Grain Company is due [indebted to?] the Updike Grain Company the sum of \$29.68, balance on car No. 13910, the same being a car bought by Updike Grain Company on a later transaction.

We also find that Robey Grain Company is due [indebted to?] the Updike Grain Company the sum of 55 cents, same being a telephone call to Sherman, Texas, which was paid at the request of Mr. R. E. Robey.

We further find that the Updike Grain Company is due [indebted to?] the Robey Grain Company the sum of \$40.71 as per account sales for the four cars, 31840, 31237, 6301 and 1045, shipped to Galveston.

The committee declines to allow the item of \$4.58 charged as protest fee, for the reason that the Robey Grain Company drew for the sum of \$40.71, and this being the amount in controversy between the parties, the committee is of opinion that it was not property subject to protest draft, while settlement was pending.

Difference in freight due Updike Grain Company, Hastings cars.....\$34.25
Due Updike Grain Co. A/S for car No. 13910.. 29.68
Due Updike Grain Co., telephone call to Sherman, Texas 55

\$64.48

Due Robey Grain Co., A/S on shipments to Galveston 40.71

Net balance due Updike Grain Co.....\$23.77

It is therefore ordered that the Robey Grain Company promptly pay to the Updike Grain Company, at Fort Worth, Texas, said sum of \$23.71, and that the secretary be instructed to return the deposit fee of the Updike Grain Company.

Note by Secretary: Mr. E. R. Kolp, one of the arbitrators, dissents from the above finding, but declines to file a minority conclusion.

Dallas Elevator Company vs. Stark Grain Company.—[By Messrs. E. R. Kolp, J. F. Wieser and E. W. Crouch.]—This is a claim filed before the arbitration committee of the Texas Grain Dealers' Association, by Dallas Elevator Company of Dallas, Texas, against Stark Grain Company of Plano, Texas, wherein plaintiff claims the sum of \$124.46.

[Mr. E. W. Rollow, being interested in Dallas Elevator Company, Mr. J. F. Wieser of Hico, Texas, was appointed arbitrator in his stead.]

This controversy arises out of the sale by defendants to plaintiffs, on November 24th, 1908, of 15,000 bushels of corn; and this sale is evidenced by a written contract of sale between the parties. The written contract embraces quite a number of features, such as storage charges, allowance for shrinkage, sacking, grinding charges, etc. The corn was shipped, or furnished by defendant, and a final bill or statement rendered. The plaintiff in turn complained of several items; and in its claim against defendant charged to defendant sundry items amounting in all to \$124.46. This amount defendant declined to pay to plaintiff, and by agreement the adjustment has been referred to this committee.

The committee has carefully examined all the papers and testimony filed in the case, and has also carefully considered the oral statements and arguments of representatives of both plaintiff and defendant, and is of opinion that defendant should pay to plaintiff \$12.25 in full settlement of the transaction involved in this controversy.

It is, therefore, ordered that the defendant, Stark Grain Company, promptly pay to plaintiff, Dallas Elevator Company, at Dallas, Texas, the sum of \$12.25, and the secretary is ordered to return the deposit fee of plaintiff.

KANSAS ARBITRATION AWARD.

Caney Mill and Elevator Co., plaintiffs, vs. B. F. Kelsey, defendant.—[By I. A. Pribble, C. A. Smith and F. B. Bonebrake.]—It would appear in the above entitled case that the defendant, B. F. Kelsey, Oxford, Kansas, on February 13, 1909, sold the plaintiffs, the Caney Mill and Elevator Co., Caney, Kansas, one car soft milling wheat at the price of \$1.11 per bu. track Oxford, Kansas, on basis of 57 lbs., 1c scale up and down, destination weight and grade to govern in final settlement.

It also appears that the said plaintiffs did not use this wheat at their own mill but consigned it to Kansas City to be sold for their own account, and that the said wheat tested 57 lbs. but graded No. 4, and on this account the plaintiff received a dock of 4½c per bu.

The question at issue is whether or not the wheat grading No. 4 should be termed "milling wheat." Your committee finds, however, upon investigation, that No. 4 wheat is accepted every day by the mills throughout Kansas as fit for milling purposes; and we, therefore, deny the contention of the plaintiff, in part, with respect to the defendant having filled his contract, as his confirmation did not guarantee any certain grade except soft milling wheat; nor does plaintiffs' confirmation call for any certain grade except that it should be soft milling wheat. It seems that this part of the contract is covered by Rule No. 4.

From the fact that the plaintiff did not object to the defendant's confirmation, it would seem that there was a thorough understanding regardless whether the wheat graded No. 2 or No. 3 or No. 4, except that it must be soft milling wheat.

Your committee believes, however, that the plain-

tiffs, the Caney Mill and Elevator Co., is entitled to some consideration, and, desiring to be fair to both parties, have decided to award the said defendant 2½c per bu. dockage, thus reducing their claim 2c per bu., or \$25.60, the car having contained 1,280 bu. It is, therefore, ordered that the said B. F. Kelsey, defendant, shall pay the said Caney Mill and Elevator Co., the plaintiff, the balance due them as follows:

Amount claimed by the Caney Mill & E. Co.
as per A/S.....\$39.92
Less allowance 2c per bu. on 1,280 bu..... 25.60

Balance due\$14.32

It is also ordered that the costs in this case be equally divided between the parties hereto, \$2.50 being assessed against each the plaintiffs and defendant, the balance of the deposit fees to be returned to said plaintiff and defendant by the secretary.

ILLINOIS LAW REGULATING THE TRANSPORTATION OF GRAIN.

So many enquiries have been received at the office of the secretary of the Illinois Grain Dealers' Association for information upon the laws of Illinois regulating the handling of grain by railroads that the following brief of the law is made by us:

Laws 1871, p. 636.—(1) Sec. 118 provides that on demand by any person, every railroad shall receive and transport grain in bulk, "within a reasonable time"; "shall load the same, either upon its tracks, at its depot, or in any warehouse adjoining its track or sidetrack, without distinction, discrimination or favor between one shipper and another, and without distinction or discrimination as to the manner in which such grain is offered to it for transportation, or as to the person, warehouse or place to whom or to which it may be consigned.

"And at the same time such grain is received by it for transportation such corporation shall carefully and correctly weigh the same and issue to the shipper thereof a receipt, or bill of lading, for such grain, in which shall be stated the true and correct weight.

"And said corporation shall weigh out and deliver to such shipper, his consignee or other person entitled to receive the same, at the place of delivery, the full amount of such grain, without any deduction for leakage, shrinkage or other loss in the quantity of the same.

"In default of such delivery, the corporation so failing to deliver the full amount of such grain shall pay to the person entitled thereto the full market value of any such grain not delivered, at the time and place when and where the same should have been delivered.

"If any such corporation shall, upon the receipt by it of any grain for transportation, neglect or refuse to weigh and receipt for the same as aforesaid, the sworn statement of the shipper, or his agent, having personal knowledge of the amount of grain so shipped, shall be taken as true as to the amount so shipped; and in case of the neglect or refusal of any such corporation, upon the delivery by them of any grain, to weigh the same as aforesaid, the sworn statement of the person to whom the same was delivered, or his agent, having personal knowledge of the weight thereof, shall be taken as true as to the amount delivered. And if, by such statements it shall appear that such corporation has failed to deliver the amount so shown to be shipped, such corporation shall be liable for the shortage and shall pay to the person entitled thereto the full market value of such shortage, at the time and place when and where the same should have been delivered."

(2) Sec. 119 provides that at any station from which 50,000 bushels or more of grain are shipped annually the railroad shall, when so requested, erect and maintain a track scale for weighing said grain at said station; and on default thereof shall be subject to a fine of \$100 a day for neglect, etc. [This provision of the law, which would become operative whenever "the persons who are the shippers of the major part of said 50,000 bushels of grain," is rarely enforced, and merely so, so far as grain shippers are concerned; since track scales so erected and kept in "good condition for use" are rarely accurate and are never a safe scale for a grain shipper to use. This amendment of the law was made at the demand of parties having little knowledge of grain scales.]

(3) Sec. 120.—"Every railroad corporation which shall receive any grain in bulk for transportation to any place within the state shall transport and deliver the same to any consignee, elevator, warehouse, or place to whom or to which it may be consigned or directed: Provided, such person, warehouse or place can be reached by any track owned, leased or used, or which can be used by such corporation; and every such corporation shall permit connections to be made and maintained with its track to and from any and all public warehouses where grain is or may be stored. Any such corporation neglecting or refusing to comply with the requirements of this section shall be liable to all

persons injured thereby for all damages which they may sustain on that account, whether such damages result from any depreciation in the value of such property by such neglect or refusal to deliver such grain as directed, or in loss to the proprietor or manager of any public warehouse to which it is directed to be delivered; and costs of suit, including such reasonable attorney's fees as shall be taxed by the court. And in case of any second or later refusal of such railroad corporation to comply with the requirements of this section, such corporation shall be, by the court, in the action on which such failure or refusal shall be found, adjudged to pay, for the use of the People of this State, a sum of not less than \$1,000 nor more than \$5,000 for each and every such failure or refusal; and this may be a part of the judgment of the court in any second or later proceedings against such corporation. In case any railroad corporation shall be found guilty of having violated, failed or omitted to observe and comply with the requirements of this section, or any part thereof, three or more times, it shall be lawful for any person interested to apply to a court of chancery and obtain the appointment of a receiver to take charge of and manage such railroad corporation until all damages, penalties, costs and expenses adjudged against such corporation for any and every violation shall, together with interest, be fully satisfied."

(4) Sec. 121.—"All consignments of grain to any elevator or public warehouse shall be held to be temporary and subject to change by the consignee or consignor at any time previous to the actual unloading of such property from the cars in which it is transported. Notice of any change in consignment may be served by the consignee on any agent of the railroad corporation having the property in possession who may be in charge of the business of such corporation at the point where such property is to be delivered; and if, after such notice, and while the same remains uncanceled, such property is delivered in any way different from such altered or changed consignment, such railroad corporation shall, at the election of the consignee or person entitled to control such property, be deemed to have illegally appropriated such property to its own use and shall be liable to pay the owner or consignee of such property double the value of the property so appropriated; and no extra charge shall be permitted by the corporation having the custody of such property in consequence of such change of consignment."

(5) Sec. 122.—"Any consignee or person entitled to receive the delivery of grain transported in bulk by any railroad shall have twenty-four hours free of expense, after actual notice of arrival by the corporation to the consignee, in which to remove the same from the cars of such railroad corporation, if he shall desire to receive it from the cars on the track; which twenty-four hours shall be held to embrace such time as the car containing such property is placed and kept by such corporation in a convenient and proper place for unloading. And it shall not be held to have been placed in a proper place for unloading unless it can be reached by the consignee or persons entitled to receive it, with teams or other suitable means for removing the property from the car, and reasonably convenient to the depot of such railroad corporation at which it is accustomed to receive and unload merchandise consigned to that station or place. Nothing herein contained, however, shall be held to authorize the changing of any consignment of grain, except as to the place at which it is to be delivered or unloaded, nor shall such change of consignment, in any degree, affect the ownership or control of property in any other way."

(6) Sec. 123.—"Every railroad corporation organized or doing business under the laws of this state, or authority therefor, shall receive and deliver all grain consigned to its care for transportation at the crossing and junctions of all other railroads, canals and navigable rivers. Any violation of this section shall render any such railroad corporation subject to the same penalty as contained in Section 3 of this Act."

One Weaver, a "commission broker" at Hutchinson, Kan., on December 15, "took a Santa Fe train about midnight for the East." He also "took" from \$4,500 to \$6,000 of his patrons' money. One curious creditor took the office desk—as a souvenir, probably.

The Canadian Railway Commission, in an order issued on December 14, directs that when grain shippers provide grain doors for cars they shall be reimbursed by railway companies. The amount of the reimbursement is fixed as follows: West of Fort William, \$1 for a lower door, and 50 cents for an upper one; east of Fort William, 50 cents flat.

The second general meeting of the International Institute of Agriculture began at Rome on December 12 and was fully attended by the foreign delegates, of whom more than a hundred were present. After the business of the day before the assembly had been transacted, a reception was held, to which the ministers and a large number of deputies had been invited, and which the King of Italy honored by his presence.

FIELD SEEDS

A seed exhibition was given by the Minnesota State Agricultural Society at St. Paul on January 11-14.

The Commissioner of Agriculture gives notice that hereafter the new pure seed law of Tennessee will be strictly enforced.

The Stocker Seed Co.'s premises at Peoria were damaged by fire on January 1; loss on seeds quite heavy; amount not named.

The Tri-State Corn School and Industrial Exposition by the Corn Growers' Association will be held at Evansville, Ind., on January 24-29.

The Spencer Kellogg Co., at Buffalo, took in eleven ships loaded flax seed for the company's mills in December, the total unloaded being 2,470,000 bushels.

The Ewing Seed Co. has been organized at Nashville, Tenn., by W. B. Ewing, J. I. Newsom, B. F. Wilkerson and W. B. Shellon; capital stock, \$15,000.

The Shrauger, Johnson & Nelson Co., Atlantic, Iowa, have purchased the business of the Ullrich Seed Corn Tester Co. and will market the apparatus.

The Southland Seed Co. has been incorporated at Dallas, Texas; capital stock, \$20,000; incorporators, Wm. D. Garlington, C. H. Tinker and H. H. Hallaway.

The Texas State Corn Growers' Association held the annual convention at the Chamber of Commerce, Dallas, on January 13, 14 and 15. L. B. Lourie of Moline, Ill., and W. J. Browne of Minneapolis made addresses.

Flax seed, which advanced in price all through December, reached the high mark on January 5, when it struck \$2.23 per bushel at Minneapolis. The loss of the W. C. Richardson in Buffalo harbor with 200,000 bushels of seed on board had the effect on prices.

A provincial seed grain fair will be held in connection with the agricultural societies in Regina, Alta., on January 25-28 inclusive. The premium list offers \$750 in cash prizes and a championship trophy. The rules do not vary in any important respect from those that were prepared a year ago.

The elevator at Indianapolis, known as the Pennsylvania Transfer House, capacity of 100,000 bushels, together with two acres of land, has been purchased by Leslie Cannaroe, Lewis H. Jordan and J. Clifford Jordan, who have formed a partnership to handle clover seed and other grain. The new owners will remodel the building and erect several concrete tanks.

Farmers' weeks (two) at Columbus, O., were distinguished by a continuous series of meetings of Associations and a state corn show, beginning on Monday, January 3, and lasting two full weeks. The meetings were called by the State Agricultural Society; and the organizations holding meetings included the hay and grain dealers and corn growers, and the various live stock associations of the state.

A seed fair with a large exhibit of grain was held at Birtle, Manitoba, on December 24. The exhibits of wheat were particularly fine, being free from weeds and of good milling quality and weight. Several samples weighed 64 pounds, and one or two slightly more. The oats were also very fine, although a few had to be rejected for wild oats. The barley exhibits were not so good, though the winning samples were particularly fine.

Canadian importers of European beans have been somewhat disappointed at the result of the past season's business with Continental firms, says the Montreal Trade Bulletin. "In one instance a large quantity of beans was received by a Canadian firm, the quality of which was away below the sample sold. But as the draft on same had to be paid against documents, the importers had no chance of examining the beans before paying the draft; and as former transactions with the same firm had proved satisfactory, there was no suspicion of unfair dealing, but when the goods came to hand it was discovered that they were below the quality bought. Consequently reclamations were made upon the shippers, which, however, have not been met, although it is hoped that for the sake of future business, a settlement will eventually be effected."

A Des Moines press correspondent says Iowa corn experts do not agree with C. P. Hartley of the Agricultural Department that farmers of Wisconsin, Iowa and Minnesota planted too late varieties of corn. At the Des Moines Corn Exposition Mr. Hartley said, in substance, that "The farmers of Iowa, Wisconsin and Minnesota have a tendency to plant late varieties of corn, which grow large ears. In the latitude of these states, late varieties cannot be grown satisfactorily each year. The farmers should not attempt to raise mammoth ears of corn. If they would plant earlier varieties, the corn crop each year would be greater and the corn would be of better quality. As it is now, the crop is either large in late seasons, or medium in early seasons." Mr. Hartley said the 90-day corn is safe; but John Sunberg, president of the Iowa Corn Growers' Association, thinks differently, and affirm-

ed positively his belief that the 90-day corn would reduce the state's yield by 50 per cent.

The seed corn house of W. T. Ainsworth & Son Seed Corn Co., near Mason City, Ill., is about completed. The building is one of the largest exclusively corn houses in the country. The main building is 50x110 feet in size and 40 feet high. There are two main floors, basement and attic. The ground floor and foundations are of solid concrete and are rat and frost proof. Ten of the bins on the west side of the house are 9 feet square and 25 feet in height, and are hopper-bottomed. Steam-pipes add to the efficiency of the bins as dryers. Around each crib is a 6-inch ventilator and there are steam pipes from bottom to top. Through the center of the building is a 16x24-in ventilator. The cribs when completed are to have a capacity of over 30,000 bushels. There is a driveway through the entire house. The house is electric lighted and steam heated, and insulated against frost by a solid board lined, covered with slaters' felt and galvanized iron. There are city water connections and fire hose for fire protection.

CORN SHOW PRIZE WINNERS.

In our December number it was our privilege to refer to Fred C. Palin, winner of the grand sweepstakes prize for the best single ear of corn shown at the Omaha Exposition. In this number we are

year, it is now the greatest yielder and the greatest prize-winning variety in the world."

THE ACCLIMATING OF GRAINS.

The fact will soon be as generally recognized now as it was formerly disbelieved, that, as a general rule, it is not a wise plan to change seed without the best of reasons for doing so, says Prof. Shaw in the O. J. Farmer. Acclimated seed in nearly all instances will give better results than seed brought from a distance, the conditions being equal. This is equally apparent whether seed is taken northward or southward. The difference is less when the change is made from east to west, and for the reason probably that the difference in temperature is less.

Experience has shown that oats taken from the north to the south are practically worthless there; though ever so good in the north, they are almost certain to rust badly in southern climes. So, too, the rustproof oats of the south when taken north sometimes rust and they are inferior in yield and in other ways to oats grown in the north. It has also been found that the seed of winter rye grown very far south, if taken from the north, does not answer nearly so well as the seed of winter rye acclimated in the south.

Experiments have also shown that winter oats of the rustproof varieties will do far better in the mid-



JOE R. OVERSTREET, THE PRIZE TEN EARS AND THE TROPHY.

able to give illustrations of the winners of the other two capital prizes.

First there is the winner of the grand prize for the best ten ears shown, bred by Joe R. Overstreet of the firm of Joe R. Overstreet & Son, R. R. 9, Franklin, Ind. The corn was "Johnson County White Dent." Mr. Overstreet says: "I attribute my success to a careful study of soil conditions, a thorough cultivation, the method of three-year rotation of wheat, clover and corn, careful selection of seed year by year, and a diligent study of what constitutes a perfect ear of corn, which presupposes the ability to know a good ear or sample of corn when one sees it. The farmer of today," says Mr. Overstreet, "must study his business just as the successful merchant or manufacturer studies his business in its every detail, or he will be lost in the busy world."

The winner of the grand prize for the best bushel of corn was G. L. Kerlin of Franklin, Ind. This corn was raised in Johnson County, Ind., about twenty miles south of Indianapolis. It was the result of years of careful seed selection, reserving each year only the best seed, looking well to depth of grain, smallness of cob, shape of ear, and market condition. "I practice," says Mr. Kerlin, "a rotation of corn, wheat and clover, with all the manure I can get. I do not want over two grains in a hill. I think I can raise more and better corn per acre than by planting more. The champion bushel is of the Johnson County White variety, a breed of corn originated in Johnson County, Ind., about twenty years ago; and by careful seed selection, year by

dle States after they have been brought from the south and grown for a few years than when first introduced. There is no saying, therefore, at present, what grains will and will not be grown in the future in any given locality.

THRESHING CUCUMBER SEEDS.

In western Kansas and eastern Colorado, where most vine crops grow to perfection on the irrigated lands, hundreds of acres of cucumbers, cantaloupes, and watermelons are reserved for seed by seed companies and by farmers who grow them for the seed houses. The growing of cucumbers especially for seed is considered very profitable, and often the owner clears from \$100 to \$150 an acre as the seed brings \$1 to \$2 a pound. While the cucumbers might be sold to canning factories, many farmers prefer to let them remain for the seed, as the expense of gathering is not so great, the income an acre being about as much. The threshing costs a reasonable amount; and it is a common sight from October to the first of December to see the seed threshers in the fields of cucumbers and melons threshing them for their seed, says a writer in the Kansas City Star.

The cucumber thresher is built on a wagon-like frame, supported by great wide wheels, and drawn by two horses. At the rear of the machine is stationed a little two-horse gasoline engine, which operates the machinery of the thresher. Just in front of the engine is the crusher that looks like a common cider mill. It contains two iron rollers, moving together and crushing the cucumbers as they

pass between them. Against the crusher sits the framework containing the seeder. Cucumbers pass from the crusher into this large cylindrical seeder, which sits horizontally. The outer surface of the seeder is a wire netting with meshes large enough to permit the seed to drop through into the vat below, but retaining the crushed cucumbers. The front end of the cylinder being lower than the rear, the cucumbers are rolled slowly forward by its revolutions until they drop out at the horses' heels. When the vat beneath the cylinder is filled with seed, a seed box is drawn on a low sled to the opening at the side of the machine, and the seeds are allowed to run out a spout into it. The threshing proceeds, and the seed is hauled away to a place where it is thoroughly washed from all foreign matter and spread out on screening wire enclosed in frames to dry.

A NEW FEEDING GRAIN.

Prof. B. C. Buffum of the University of Wyoming, exhibited at the Omaha Corn Exposition a new feeding grain developed by him, which is called a new variety of emmer, a hybrid superior to corn in bone nourishment and flesh producing power, that yields from 80 to 150 bushels per acre, or about double the best Russian spelt.

It is described as a hardless grain of large size and fixed hull, especially suited to the arid, semi-arid or irrigated country west of the 100th meridian, including all of the elevated plateau of the Rocky Mountains and the valleys of the mountain ranges. This region, from the Gulf of Mexico to the Canadian boundary, has an average elevation too great for the maturing of corn. Stock raising of all kinds is still the dominant interest throughout the whole of it; and the discovery of the new feed grain, if it proves permanent and satisfactory, should relieve the stockmen from the cost and trouble of importing corn from the middle Western States for fattening or finishing their animals for market.

OMAHA'S NATIONAL CORN EXPOSITION.

The National Corn Exposition was all that was expected in the way of a show of grains and grasses, the majority of the states being represented in the exhibits, while the general arrangement of exhibits and the management of the show were an improvement over last year. The attendance (about 240,000), however, was somewhat smaller, owing, perhaps, to the colder weather. It has been suggested that future shows should be held at a time later in the winter. The chief reason for this change is that it would allow the different states to hold their state shows first. This will give opportunity for competition between the corn growers of the various states before the National Show opens and would eliminate a lot of poor corn that would otherwise find its way to the National Show. "The result would be," says the Nebraska Farmer, "less corn but better corn, which is a thing greatly to be desired where space is limited as it must be in the case of an indoor winter show. It seems the most logical thing in the world to have the state shows first and the National Show last, just as we now have our list of state fairs and minor stock shows all heading in the International Live Stock Exposition at Chicago."

As announced in the December issue of this paper, Indiana carried off the honors on corn which, according to the Indiana Farmer, is largely due to the fact that Indiana farmers have been "getting together, grading up, farming along intelligent and successful lines and then getting results. They point to the fact that four years ago the Indiana Corn Growers' Association started with sixteen members, and that now it has 800 and has reached out into every portion of the state. They also point to the fact that through their efforts and labor land has gone up and up until now when good bottom corn land will readily sell for from \$200 to \$400 per acre, depending considerably upon location. This advance they contend has been brought by reason of having demonstrated that by intelligent farming, the yield of corn has been doubled and in many instances increased three fold. What has been accomplished in Indiana has been a great object lesson to the Western farmers, and thousands of them are going to profit greatly by what they have seen and heard."

The prize corn this year brought higher prices than it did in 1908. The grand prize single ear by Fred C. Palin was not offered for sale, it being the property of the W. K. Kellogg Company, who put up the \$1,000 trophy which the ear won. The best ten ears by T. R. Overstreet were bought by E. E. Faville of Successful Farming for \$335 against \$280 paid in 1908. The price this year is the highest ever paid for ten ears of corn.

The owner of the grand prize wheat, H. E. Krueger of Beaver Dam, Wis., bought the peck exhibited for \$104, having out-bid J. J. Hill, who had wired his representative to buy the wheat if it could be had. He proposed subjecting it to a milling test along with the North Dakota and Minnesota wheats to determine its relative merit as a flour maker. This rivalry was expected to have stirred up a considerable contest at the auction, but the railroad representatives backed down when they found what

the wheat was going to cost them. It is doubtful, however, if Mr. Krueger would have let them have it at any price. He said that he is not afraid of a fairly conducted milling test, but he did not propose to run the risk of a test conducted by his enemies, which he could not watch personally.

CORN SHOWS AND CONTESTS.

It is proposed to hold a corn exposition next fall at Columbus, S. C., with a prize list valued at \$10,000.

The annual corn show at Mitchell, S. D., will be held on January 17-22. Premiums are offered on corn, wheat, oats and barley, also on clover seed, timothy and alfalfa to stimulate the interest in the grasses and clovers.

Professor Lyman Carrier, of the Virginia Polytechnic Institute, who is secretary and treasurer of the Virginia Corn Growers' Association, is making arrangements for a corn show to be held in Richmond, Va., during the first week of February, in connection with the State Farmers' Institute. It is the intention of the association to have on exhibition corn which has taken prizes in shows throughout the State, so that a final settlement as to which is best can be made.

The North Carolina Commissioner of Agriculture and other members of the Corn Award Committee in December reported on awards to contestants in the Wake County contest, the most interesting ever held in the United States, giving the first premium to J. F. Bates for 226 and 213 bushels grown on one acre at a cost of 61½ cents. Wm. H. Rohhins reported second largest yield, 157 bushels at 14½



G. L. KERLIN.

cents cost, but it was not measured according to the Committee's rules and so was not counted.

A meeting was held at Lexington, Ky., on December 18 and a committee appointed to make an effort to form a State Corn Show Association for the purpose of holding corn shows in a large number of the counties of the state, winding up with a big corn exposition at Louisville. This committee is composed of Professors George Roberts and J. J. Hooper, of State University, and Frank McMeekin, of Woodford County. The following officers were elected for the association, which was organized to hold a show at Lexington: President, George D. Karsner; vice president, George Roberts; second vice president, J. J. Hooper; secretary, A. H. Gilbert; treasurer, C. W. Mathews.

Sec'y Wilson of the Agricultural Department, on December 14, in his office at the Department of Agriculture, presented diplomas of merit to Bascomb Usher of South Carolina, De Witt Lundy of Mississippi, Elmer Halter of Arkansas and Ralph Bellwood of Virginia—all boys under eighteen years—for special proficiency in agricultural pursuits. These young men are among the 12,500 in the boys' demonstration work in the South, each of whom planted one acre of corn and cultivated it under instructions from the Department of Agriculture. The diploma winner from South Carolina made 152½ bushels per acre, 147 bushels were made in Mississippi, 135 bushels in North Carolina and 122 bushels in Virginia. The club average was about 60 bushels. The diplomas carried with them free transportation to Washington to receive them.

IOWA CORN SHOW.

The following are the prize winners for small grain exhibits at the Des Moines Corn Show in December:

Grand Champion Winners—Late and early oats, J. W. Coverdale, Elwood; reserve, Fred McCulloch,

Hartwick. Spring and winter wheat, Ludwig Bengtson, Essex; reserve, John Justice, Ankeny.

Winner of Sweep Stakes—Late oats, Fred McCulloch, Hartwick; early oats, Edward R. Trites, Oaksville; best bushel oats of any variety, Fred McCulloch, Hartwick; large oats other than white, Andy Kirsch, Carroll; winter wheat, Henry George, West Union; spring wheat, John Justice, Ankeny; brewing barley, Fred McCulloch, Hartwick; red clover, J. B. Davis, Berwick; timothy seed, John Burgy, South Amana.

Winners of corn prizes were as follows: Best ear of the state, grand champion sweepstakes, C. O. Garrett of Mitchellville; best ear in the state, grand champion sweepstakes, J. J. Proudfoot of Altoona; best junior ten ears, grand champion sweepstakes, J. H. Petty of Elliott; best amateur ten ears, grand champion sweepstakes, L. O. Wise of Red Oak.

The following officers were elected for the year 1910: President, Grant Chapman of Bagley; vice president, George M. Allee of Newell; secretary, M. L. Bowman of Waterloo; treasurer, Fred McCulloch of Hartwick. District vice presidents: First, Frank Harker of Milford, second, C. V. Gregory of Ames; third, no election; fourth, H. E. Brown of Salix; fifth, Miller S. Nelson of Goldfield; sixth, H. A. McCaffree of Janesville; seventh, John Sundberg of Whiting; eighth, C. R. Bishop of Altoona; ninth, Charles F. Steen of West Liberty; tenth, B. W. Crossley of Council Bluffs; eleventh, J. A. Mason of Carlisle; twelfth, U. S. Chasey of Hedrick.

Although there was much adverse comment on the attendance of the show in Des Moines, which was small, the people of the city showing but little interest in the exhibition, it is probable the 1910 Exposition will be held at the same place.

MUSTARD SEED PRODUCTS.

Con. Gen. Skinner at Hamburg recently sent to the Dept. of Commerce and Labor a report on the German trade in the products of mustard seed. It appears that the seed imports of 1909 (January to September), were from Italy (628.4 tons), Netherlands (432.6 tons), and Russia (2,493.8 tons) with only 439.2 tons for all other countries. This is 3,994 tons compared with 3,716.5 tons same period of 1908.

The exports of seed were only 120.7 tons in 1909 compared with 171.8 tons in 1908. The imports of pulverized seed were only 22.2 tons in 1909 and exports 102.7 tons.

The seed is used chiefly for the manufacture of mustard oil, for which three varieties are used—the white, the black and the juncea. The white and black mustard oil can be used interchangeably, and must not be confounded with the commercial product known as essential mustard oil.

All mustard seeds contain a ferment—myrosine—and a glucoside called "sinalbine." This ferment acts upon the sinalbine in the presence of water, producing the essence of mustard in which is found the characteristic excitant. The white mustard yields an essence which is less violent than that of the black seed. The yield of greasy oil from the white seed, obtained by pressure, runs from 20 to 25 per cent of the weight of the grain. The cake is used for fertilizing purposes and is sometimes mixed with other oil cake and thus fed to cattle as a means of promoting appetite.

Apparently the more valuable mustard products are obtained from black mustard seed, which contains from 15 to 20 per cent only of greasy oil. The withdrawal of this heavy oil, either by pressure or by diffusion with sulphuret of carbon, is a matter of secondary importance. The essence is formed by the contact of myrosine and myronate of potash in the presence of water, and the elimination of the heavy oil does not affect this action. It follows, therefore, that mustard flour, or oil cake, if fed to live stock, could readily determine a mortal irritation in the digestive organs.

Black mustard oil cake—that is, ground mustard seed from which the heavy oil has been withdrawn—is treated for the commercial manufacture of essential oil.

The natural essential oil is quoted at about \$6.66 per 2½ pounds, and the artificial at \$2.85. The essential oil is used chiefly by druggists, but a fraction of it has been largely replaced by the artificial (cheaper) essence, which is also used to adulterate the natural essence.

The juncea variety grows chiefly in Russia and while poor in myronate yields 28 to 30 per cent of heavy oil. The latter is used for illuminating, lubricating and soap-making purposes, the cake being reduced for table purposes.

During the past season 36,964,307 bu. of Canadian grain were shipped through Canadian ports and 19,611,216 bus. through American ports, 17,377,154 going through Buffalo.

Local statisticians estimate the corn crop of South Dakota in 1909 at 86,000,000 bushels, which is quite a bunch for a state "so far north of the belt." Even Norman County, Minn., 'way north of the South Dakota-North Dakota line, also began to ship corn with crop of 1909.

TRANSPORTATION

Both grain and coal cars are reported scarce by shippers in all parts of Illinois and some parts of Iowa.

The embargo upon wheat shipments to Minnesota terminals, laid on account of the switchmen's strike, was raised by the Great Northern on December 28.

The C. & A. is making an elevator allowance of $\frac{3}{4}$ c per 100 lbs. at St. Louis and East St. Louis. The T., St. L. & W. is allowing 1c at same points and at Granite City.

Investigation by the Commerce Commission of the milling-in-transit privilege and its influence on rates, etc., began at Washington yesterday, January 14, and will be continued at Chicago, Minneapolis, and other terminals at dates not yet announced.

The demurrage rules provided under Michigan laws are somewhat different from those of the new Code, and being more favorable to shippers, are likely to be insisted upon by the Michigan Railroad Commission, on the ground that demurrage is a local question entirely.

The seriousness of the blockade of the rail lines within the Chicago city limits was made apparent on December 28 when wheat that was good enough for delivery on December contract sold on track at 3c under the December price. The buyer was unwilling to take the chance of being able to get the wheat into elevators and available for delivery before the close of business on December 31, says the Record-Herald.

The investigation under way by commercial interests of Philadelphia on the harmful effects to Philadelphia of the present preferential rates has revealed some interesting facts, as to what Philadelphians believe is the important part the Pennsylvania Railroad is playing in building up the trade at Baltimore. From official figures it was shown that the Pennsylvania has even outstripped the Baltimore & Ohio Railroad in the aggregate grain business done at the port of Baltimore. The total number of cars of grain sent to Baltimore by the Pennsylvania road in the six years 1904-1907 having been 73,772 against 31,941 sent to Philadelphia.

It is generally believed that the strike in the Northwest is tying up more grain and doing more damage to trade than the daily papers state. On January 4 it was estimated that on Minnesota terminals alone from 5,000,000 to 6,000,000 bushels of grain were tied up. Several days later, Jan. 7, Pope & Eckhardt Co., Chicago, said in their daily circular: "The railroad situation here and generally in this section is worse now than ever and unless the milder weather in sight covers an extended period, very serious further delays must be expected on all grain in transit or which may be loaded. Coal and perishable freight naturally now have the preference."

The new rail rates published by the Eastern roads, effective February 1 and soon thereafter, establish equal rates on all grain, basing on Chicago to New York 16c per 100 lbs., whether originating in Illinois or west of the Mississippi River. The exception is on oats and barley via Minneapolis, originating beyond, which will pay $15\frac{1}{2}$ c from Chicago. The proportion of the through rate to Chicago from Illinois points will remain unchanged. So far as tariffs are now in preparation, these rates will be effective on the Santa Fe on February 5, on the Alton on February 7, the C. Gt. Western, February 2, on the C. & E. I. about February 12; on all other Illinois lines on February 1.

The protest against the proposed Demurrage Code which would give but two days instead of the present four for unloading freight cars without penalty has been made by the Boston Chamber of Commerce. H. L. Russ, former president of the New England Grain Dealers' Association, which took part in the contest against cutting down the free time in Connecticut, declared that that state was almost unanimously against the sentiments contained in the report. "The grain dealers of Connecticut," he declared, "need four days in which to unload, and it is because of their firm stand in this matter that Massachusetts grain dealers enjoy the same necessary privilege." Representatives of the timber, flour and wool interests made the same protest.

RAILWAYS AND SWITCHING LINES.

The Commerce Commission on December 21 handed down a report and decision in the case of the Star Grain and Lumber Co. against the A. T. & S. Fe Ry. Co., *et al.*, on the status of "tap lines," so called. The case directly involved the right of tap lines to receive from the regular carriers any allowance out of the published rates for hauling logs from the forests to the mills by which the tap lines are owned. The Commission announced the following conclusions:

"The Commission cannot recognize as common carriers under the act, lines that do not publish tariffs in lawful form or concur properly in lawful tariffs of other lines in which they are named as parties, or that do not file annual reports and keep

their accounts in accordance with the system prescribed by the Commission, or that do not in all other respects comply with the law.

"The mere interposition, however, between the lumber mill and the carrier of a paper railroad corporation that calls itself a common carrier and complies with the act in those respects, but is owned by the mill or its proprietors, does not give legality to the so-called tap line allowances or meet the requirements of the Commission. As an administrative body the Commission cannot stop at the surface of a transportation problem because its form and outward appearance are regular, but must reach the actual situation and examine its real substance, and thus be able to enforce the prohibitions as well as the requirements of the act.

"The underlying principle of the law is to forbid preferences, discriminations and departures from the published rates, and any allowance or division made to or with a tap line, whether incorporated in form as a common carrier or not, that is owned or controlled, directly or indirectly, by a lumber mill or by its officers or proprietors, and, beyond the logs that it hauls to the mill, has no traffic except such as it may pick up as a mere incident to its effort to serve the mill as an adjunct or plant facility, is a preference and discrimination and an unlawful departure from the published rates.

"The Commission enters no order in this case, but contents itself merely with the announcement of the above general conclusions, but it looks to the carriers that are paying such allowances immediately to make their arrangement to discontinue the practice. It also suggests that the carriers and shippers ought promptly to confer, so that the entire situation may be readjusted on a basis that will eliminate the unlawful practice and will give the shippers transportation on a reasonable basis."

Commissioner Prouty filed a dissenting opinion. The effect of the decision is thought to be wide enough to cover all so called "Industrial Lines" that are built and so called railways companies operated for the purpose of milking the carriers and to force what amounts to a substantial rebate from the rate.

AMENDING THE COMMERCE ACT.

On December 10 Senator Cummins of Iowa introduced a bill in the Senate to amend the commerce act, the provisions of which briefly expressed are as follows: The bill requires the Commerce Commission to promulgate a form of classification of freight, and to prepare a plan for the statement of freight rates, which shall hereafter be made in a uniform way, and the carriers are required to adopt this classification; the Commission is authorized to consider rates on its own motion, with a view to determining their reasonableness, and is empowered to fix maximum and minimum rates; in any action instituted in court to set aside an order of the Commission respecting rates, the courts are prevented from inquiring into the reasonableness or sufficiency of any rate fixed by the Commission.

The bill provides further, that changes in rates shall not become effective until they are approved by the Commission. It prohibits the acquisition of control by any commerce carrier of any parallel competing line, or from acquiring the capital stock or bonds of any other carrier that is a competitor. A carrier is prohibited also from issuing any capital stock without payment at par, either in money or in property; and, in effect the Commission shall have supervision of the issues of stocks and bonds by any carrier. Specific directions are given for the disposition of the proceeds of any sale of bonds. After January 1, 1911, no carrier doing interstate business shall be permitted to engage in any other business than that of a common carrier.

On January 3, Representative Mann of Chicago introduced in the House a bill to amend the same laws. The bill proposes to create in the Department of Commerce and Labor a bureau to be called the Bureau of Transportation, where a shipper may file complaint against a railroad. If, after an investigation, the Commissioner of the Bureau of Transportation finds there is justice in the complaint, he must report the facts to the Attorney-General of the United States, and if the latter is satisfied there is a cause of action he is required to file a petition with the Commerce Commission and prosecute the case at the expense of the Government. The shipper may, if he prefers, still file his complaint direct with the Commission and prosecute it at his own expense, as the present law provides.

The bill makes it the duty of common carriers to establish just and reasonable classifications and regulations, and authorizes the Commerce Commission to prescribe what they shall be; it amends the long and short haul clause of the commerce act to provide that the charge for a short haul shall in no case be greater than the charge for a long haul and the charge for a through rate shall be no greater than the aggregate of the local rate; false or padded claims for damages by a shipper are prohibited, as are rebates.

The provisions of the law in regard to filing

complaints and authorizing the Commission to adjust complaints and fix rates are much enlarged, and give power to the Commission not only to fix rates upon complaint, but also to adjust and prescribe classifications, regulations, and practices generally. The Commission may suspend the taking effect of any proposed rate or change in classification until full hearing be had on the subject; and given power to establish through rates and joint rates, the shipper to select the entire route over which a shipment shall be transported. The carriers are required to furnish rates on written application. Every shipment of property on which a rebate is paid is made a separate offense and the Elkins law is amended to that extent. The railroads may exchange transportation for advertisement of their time tables in newspapers.

The Mann bill is similar to the Cummins bill in that common carriers are prohibited from owning or acquiring ownership of stock in any competing carrier; it is made unlawful for a railroad company to issue any stock or bonds except for the acquisition of property, the construction of its lines, the improvement of its service, or the discharge of its obligations, and such issue may be made only after filing with the Commissioner of Transportation a statement setting forth the full details of the issue; said stock to be sold for not less than par and bonds for not less than the reasonable market value, and a penalty of \$20,000 fine and imprisonment for five years is provided for the illegal issuance of stocks and bonds.

The administration bill was outlined in a special message to Congress on January 7, and was introduced by Rep. Townsend on January 10. The bill provides for a special court composed of five Federal circuit judges to have exclusive original jurisdiction over matters growing out of orders of the Interstate Commerce Commission. These judges shall serve by assignment of the chief justice for a term of five years, but no two of the judges' terms will expire at the same time, and thus under all circumstances four of the judges will have had experience with the technical questions involved in the matters coming before the court. When an order of the Commission is contested in the Commerce Court the petition of the carrier taking the matter into the court will not stay the operation of the order nor can it be enjoined except by the court or by some member of it, and then only upon notice and hearing, except in cases where irreparable injury would be caused by such notice and hearing. In such case the court or judge granting the injunction must make a finding from facts to the effect that irreparable injury would result. Provision is made for the prosecution and defense of all matters taken into the Commerce Court by the Department of Justice, and for this purpose it is proposed to appoint an assistant to the Attorney General, who shall have special charge of such cases.

As recommended by the President, agreements between carriers will be permitted, provided they are made public and filed with the Commission and subject to the same rules and regulations as to justness and reasonableness as are rates and other recognized regulations. Carriers must quote correctly in writing upon the written request of a shipper any rate between the place of proposed shipment and any other place on the carrier's line or any line with which the initial carrier has traffic arrangements, as evidenced by joint published tariffs. In case an erroneous rate is given in writing whereby a shipper is injured, the carrier whose agent has made the misquotation is subject to a penalty of \$250, to be collected by and paid to the government.

The bill would empower the Commission to suspend the carrier's notice of change of rate pending decision as to whether the proposed new rate is just and reasonable.

As for freight, the shipper is given the right "to route his freight" and classifications must be just and reasonable. The commission is authorized to initiate proceedings upon its own motion.

It is proposed to prevent the issuance of stock and bonds except for legitimate railroad purposes, and with the approval of the Commission. As recommended in the special message of the President, it is proposed to prohibit every carrier from acquiring any stock in a line of railroad which in any way competes with it, except as a court may find that the people are better served by such acquisition. It is not proposed to compel carriers to dispose of stock which they own in competing lines, and where a carrier owns a majority of the stock of a parallel line it may be permitted to purchase the balance of the stock. If a carrier is now operating a competing line under a 25-year or longer lease, it may purchase such road at the expiration of the lease.

A permit has been issued in Chicago for the erection of a five-story concrete and steel grain elevator for the Northwestern Malt & Grain Co.

Dealers in grain at Owensboro, Ky., have been "warring"; and have therefore been able to buy large quantities of both corn and wheat at prices much out of line with the general market.

HAY AND STRAW

An alfalfa meal mill will probably be erected in Meridian, Cal., in the near future.

Work of construction on the new alfalfa mill at Hillrose, Morgan County, Kan., is progressing rapidly.

The Lindsborg Alfalfa Milling Co., of Lindsborg, Kan., has decided to erect an ice plant at the mill of from fifteen to twenty ton daily capacity.

The machinery for the new alfalfa mill at Fowler, Kan., has arrived. Building operations have been retarded because of unfavorable weather conditions.

The Inter-Mountain Milling Co., is erecting a mill at Salt Lake City, Utah, for the grinding of alfalfa. The structure is to be two stories high with dimension of 30x40. Plans for storage barns and other improvements are also under way.

Messrs. Cline and Weisthamer of Kremlin, Okla., who are planning an alfalfa mill for Fort Morgan, Colo., have announced that they will erect a plant at Rocky Ford, Colo., if given a guarantee of a 2,000-acre crop for grinding. They will ask no bonus.

South Dakota farmers are watching their hay stacks carefully, as a continuance of severe weather will mean a hay shortage for many stock owners, who do not as a rule estimate four months of feeding, which they will be up against if there is no break before March 1.

W. E. Welch, of Oklahoma City, Okla., representing the Consolidated Alfalfa Milling Co., has been in Sherman, Texas, looking over the field with the view of erecting an alfalfa mill there. The proposed mill would have a maximum capacity of 100 tons per day. No bonus is asked.

C. E. Hedrick, a contractor of Newton, Kan., has been in Kinsley, Kan., urging the building of a \$12,000 alfalfa mill with a capacity for grinding from one to two tons of dry hay per hour. The plant would contain an elevator and complete corn grinding and feed mixing equipment.

The Pecos Valley Alfalfa Mill Co., of Hagerman, Chaves County, N. M., and Terrell, Texas, has been incorporated with \$30,000 capital stock. The directors are E. J. Lockhead, M. C. Cartwright, Robert L. Warren, Roy Lockhead, J. B. Anthony, of Terrell and James Williams, of Hagerman.

The receipts at Pittsburg, says the Reporter, January 11, have been more liberal and billings are heavier. If arrivals continue this market may react slightly next week, but at present, full quotations are easily realized, and all arrivals are quickly sold. No. 1 clover and No. 1 heavy mixed are wanted.

Timothy hay on the Pacific Northwest, in the face of the biggest crop on record (about 18,000 tons), is said to be "cornered" at Ellensburg, Wash., by Henry Kleinberg and certain associates. The hay is mostly stored in the Kittitas Valley. The hay was purchased at \$16 to \$18 per ton and now commands \$22.

It is generally understood that the alfalfa mill at Proberta, Tehama County, Cal., which was destroyed by fire last summer, is to be rebuilt on the concrete foundation still standing and construction work will soon be commenced. Several hundred tons of prime alfalfa hay from last season's crop are now stored in the Alfalfa Products Co.'s two warehouses awaiting the re-opening of the mill.

Oklahoma and Kansas alfalfa dealers assert they have solved the problem of saving the several cuttings of that forage. It has been demonstrated that alfalfa cut green can be taken to the mill on the same day and made into a good commercial meal. Heretofore in waiting for the natural process of curing in the fields, as was thought necessary, a very large per cent of each year's yield has been ruined by rains. The elimination of this heavy loss is what is claimed for the process in vogue at the Oklahoma and Kansas mills.

A proposition has been made to the Chamber of Commerce of Fort Morgan, Colo., by Messrs. Cline and Weisthamer of Kremlin, Okla., to erect a thirty-ton alfalfa mill. They ask no bonus, but that the organization shall assist them in securing 1,000 tons of alfalfa at market prices, to be ground as soon as the mill is erected, and that the hay from 1,500 to 2,000 acres of alfalfa be delivered to the mill for three years. They agree to pay \$7 a ton for alfalfa after this season. They also propose to erect alfalfa mills at Rocky Ford, Cheraw, Otero County, Colo., Merina, Logan County, Colo., and Garden City, Kan.

Hennepin county farmers will have a central warehouse in Minneapolis soon to which farmers of Minnesota may ship their hay and escape the heavy demands on receipts of the regular commission men. The initial move was recently taken at Loretto, Minn., by the Hennepin County Farmers' Hay and Produce Association. Warehouses in St. Paul and Duluth will follow. The farmers are waging war against the hay commission men of the cities, alleging overcharges in commission, freight and cart-

age and assert they are not getting correct weights. An appeal has been made to the Railroad and Warehouse Commission.

Mr. Welsh, who represents big alfalfa milling interests in Oklahoma that have decided to erect three mills in Texas, recently visited Sherman and had a conference with a number of business men relative to the proposition of placing \$10,000 of \$20,000 stock in that city. It is understood that business men of Sherman have subscribed for quite a block of stock and the mill will undoubtedly be built.

ALFALFA HAY CROP SHORT OF DEMAND.

The enlarged demand for alfalfa products created by the mills, coupled with bad roads in the alfalfa regions of Kansas and Nebraska, has caused a decided shortage in the hay supply. The only really serious fact in this connection is that the weather is no benefit to the hay, and that when the hay is not under shelter the loss by depreciation of quality is likely to be very considerable; besides, damp hay even when it is entirely cured, is not fit for the mill which handles dry hay only.

BALING HAY.

The American Hay Co. of New York writes the Montreal Trade Bulletin urging the education of Canadian hay shippers to the use of better loop and hook ties when baling hay. "At present," the New Yorkers say, "about 5 per cent of the bales are broken before finally delivered; this means heavy losses, and necessarily a larger margin to be figured in sales. We hope this matter can be agitated with results, as it means many dollars to all interested in the trade."

The Bulletin's private inquiries sustain the complaints, at least to a certain extent, as it is common for balers to use No. 14 wire at a very high tension on 180 to 200-lb. bales, and it does not stand the usage.

SPELT AND EMMER OF TEXAS.

Judge Korie, agricultural commissioner of Texas, in a recent bulletin says:

"Two copies commanding much interest and study now are emmer and spelt. Both are kinds of wheat, and both are great drought resisters. Both are heavy yielders, and both are splendid food for horses or hogs or live stock generally. The greater yield of these crops and the greater certainty of a good yield in arid sections makes either one or both preferable for cultivation to corn.

"Spelt has round open heads with rather long stems to the grain. It threshes with the hull on, like rice. It is fed with the hulls on. Horses do specially well on it, and it is said by those who have raised it and fed it, to excel barley in that respect. It weighs heavier per measured bushel than oats. In the vicinity of Amarillo, where tested, it has yielded forty-five bushels per acre with only an average season. In very dry years of heat and protracted drought it will produce a fair crop more safely and abundantly than the usual corn or grain crops.

"With reference to emmer much the same can be said as has just been stated for spelt. Many farmers consider that spelt and emmer are identical. This is an error. Emmer has flat compact heads, and grain keeps only a short stem when threshed. Like spelt or rice, emmer threshes with the hulls on, and is a great drought resister. It is also splendid as a feed for horses, and all classes of live stock do well on it. It also is a better food for live stock than barley. It weighs heavier than oats per measured bushel and yields about forty bushels per acre as an average crop. With good seasons a much greater yield is obtained. There does not seem to be much choice between emmer and spelt, except it be that spelt has a somewhat wider range of adaptability and produces a somewhat higher average yield of grain per acre. Certain it is that both are valuable for food for live stock, are great drought resisters and sure and heavy yielders in dry hot years."

Texas farmers seem to be going quite extensively into broom corn culture, tempted by present high prices.

At the annual meeting of the directors of the Chicago Board of Trade on January 10, it was reported that progress had been made on the new building project, and that a complete report would be made later. It is likely the present building will be replaced by a modern structure.

Hon. W. H. Cushing, Minister of Public Works at Calgary, Alta., after a visit to Victoria and Vancouver, B. C., asserts there is every reason to believe adequate terminal facilities will be provided at the coast before next year's grain crop is ready for market. Mr. Cushing, who is among the promoters of an elevator at the Coast to cope with the trade, endeavored to have the governments of Alberta and British Columbia to guarantee bonds so that they will be enabled to raise the money for the construction of elevators, but the government of British Columbia at least has refused to do that.

PERSONAL

J. W. Ford, Jr., of Chatsworth, Ill., has taken the position of manager of an elevator in Varna, Ill.

Herb Baldwin of Remsen, Iowa, has gone to Lake Andes, S. D., to take charge of a grain elevator.

Merle Frazier has become manager of the C. B. Munday Elevator at Dorsey, Madison County, Ill.

William Krueger of Brownston, Minn., has taken charge of the Monarch Elevator at Renville, Minn.

The Germantown Grain & Supply Co. has engaged O. L. Vinyard of Horton, Kan., to look after the office work.

F. H. Barnes of Stillman Valley, Ill., has taken a position with the White Rock Farmers' Elevator at Kings, Ill.

John R. Johnston of Glyndon, Minn., is now buying grain for the Federal Elevator Co. of Sabin, Clay County, Minn.

L. V. Duncancy, who has taken charge of the Imperial Elevator at York, N. D., has removed to that place from Kermit, N. D.

Reginald N. Boucher, of I. N. Boucher & Son, grain and feed dealers of East Dedham, Norfolk County, Mass., has taken a Government position.

Paul Fodds, second man in the McCall-Webster Elevator at Hayti, S. D., has become manager of the elevator at Aberdeen, S. D., of the same company.

J. W. Stiteler, who has resigned as manager of the Lidgerwood Farmers' Elevator Co. of Lidgerwood, N. D., has been succeeded by Thornton Ford.

Larry Mulligan, who has been in charge of the Updike Elevator at Shickley, Neb., has resigned and been succeeded by Mr. Peterson, of Euhling, Neb.

Henry Arneson has taken charge of the Anchor Elevator at Cottonwood, Minn., relieving Agent Peterson, who will go to South Dakota to live on a claim.

B. J. Morey, superintendent of the Farmers' Elevator Co. of Dayton, Iowa, has resigned to become superintendent of the Farmers' Elevator Co. of Yale, Iowa.

Scott Armsworth has been engaged as manager for the Cisco Grain Co. of Cisco, Ill. Edward Weillepp will be his successor with the Shellabarger Elevator Co.

D. E. Hedges, who succeeds Mr. Falcom in the elevator and lumber business at Mt. Vernon, Iowa, has removed with his family from Central City, Iowa, to that place.

William Zimmerman has resigned as local agent for the St. Anthony & Dakota Elevator Co. at Hankinson, N. D., to become buyer for a farmers' elevator at Beach, N. D.

James Glasgow of Barnesville, Minn., who has been manager of the Duluth Elevator there for the last fifteen years, has gone to Canada to manage an elevator for the same concern.

Peter Duchene, who represented the Farmers' Grain Co. of Devils Lake at Hansboro, N. D., has taken a position with the Minneapolis and Northern Elevator Co., at East Grand Forks, Polk County, Minn.

W. H. Daniels, who has been in charge of the Intercolonial Grain Elevator at St. John, N. B., for some years, has resigned and will make his home at Preston, Ont. He found that the dust of the elevator was injurious. R. E. Strang, weighman at the elevator, will succeed him.

Major David F. Allen, one of Indiana's best known men, is in a critical condition in Frankfort, Ind., as the result of a stroke of apoplexy. In 1864 he became a grain dealer with his brother Edward under the firm name of the City Grain & Elevator Co., at Frankfort. They also operated a flour mill there in 1871.

John McLeod, member of the grain firm of John McLeod & Co., Minneapolis, Minn., was struck by an automobile in that city recently while alighting from a street car and hurled thirty feet upon the fender of a car following and badly injured. The chauffeur sped his machine away before the police arrived, but two witnesses to the accident observed the number of the car and through this clew the police hope to apprehend the chauffeur.

Workmen got busy recently at Napoleon, O., strengthening the foundations of the Vocke Flouring Mills and warehouse on Perry street, that city. An undiscovered leak in the mill race near the flouring mills was the cause of the trouble which nearly caused a cave-in between the mill and a nearby candy factory, which endangered the foundations of both structures and the elevator. The ground between the buildings, 40 to 60 feet, had sunk 20 feet before the leak was discovered. The buildings stand upon the bank of the Maumee River and a sudden thaw before the repair work is done might mean a big loss to the owners of the flouring mill and elevator.

The CO-OPERATIVES

The South Dakota Farmers' Grain Dealers' Association will hold the annual meeting for 1910 at Sioux Falls on February 9 and 10.

At a meeting at St. James, Minn., the stockholders of the Farmers' Elevator Co. voted (71 to 21) to continue the organization. Final action will not be taken until the annual meeting in June next.

The ancient suit of the Farmers' Grain and Fuel Co. of Great Bend, Kan., against a stockholder to compel payment of an assessment equal to 100 per cent of the value of the stock to pay the insolvent company's debts, has been terminated by a decision of the Supreme Court to the effect that the stockholder was not so liable.

The Texas Farmers' Union having refused to enter a national organization, it is believed that the various other state Unions will incorporate separately immediately, as the withdrawal of Texas from the parent Union has destroyed the legal existence of the national system. As independent Unions the members will maintain a National Council which will include also representatives to the National Grange, American Society of Equity and Grain Producers' Societies. The Texas farmers will no longer contribute 16 cents annually dues each into the national treasury but the state dues of \$1 annually will accumulate \$200,000 for the advancement of Texas farmers' enterprises.

MANITOBA GRAIN GROWERS.

The most momentous of all meetings of the Manitoba Grain Growers' Association was that held at Brandon on December 13-18 last. Following up the announcement, reported on another page, of the purpose of the government to take over the elevators in the province to be operated by the government as public utilities, the Association adopted resolutions favoring "public abattoirs" operated by the government; the operation by the Grain Growers' Co. of a commission bureau to handle grain and dead meat; the construction of the Hudson Bay railway; the amendment of the grain inspection act to provide for duplicate sampling, or checking of the sampling; and the construction by the railways of snow fences "to protect farmers from loss."

The directors and T. A. Crerar, of the Grain Growers' Co. will act as delegates to assist the government in constructing a bill for a law to take over and operate the grain elevators as public utilities.

J. W. Scallion, of Virden, honorary president of the Association, is a large farmer in Virden district, where he owns 800 acres of land. He settled there 30 years ago, and has, during that time, actively advocated the claims of the agricultural industries. Four years ago he was appointed by the provincial government on the beef trade commission, but resigned soon afterwards.

D. W. McCuaig, who was re-elected acting president of the Association, is a native of Glengarry, Ontario. He has held his office continuously since 1905. Mr. McCuaig has farmed in the Portage district for twelve years, having taken a homestead when he went west from Glengarry. In discussing the formation of the Association he said: "We formed this organization because we considered there existed a combine in the grain trade, and found that it was difficult for farmers to market their grain, owing to the manipulation of the grain dealers. The farmers, accordingly, banded together to protect their rights in reference to freight shipment, permission to load direct into cars, etc. The Association has met with considerable success, and now numbers 7,000 members in the province. The greatest question before us now is that of interior elevators, and the terminal elevators at Fort William and Port Arthur, which we are urging should be taken over by the provincial and Dominion governments respectively. We are also asking for government ownership of abattoirs."

MINNESOTA FARMERS' ELEVATORS.

The Farmers' Grain Dealers' Association of Minnesota met at Minneapolis in annual convention on January 6. In opening the convention President Smith said that line companies have been offering from 6 to 10 cents more per bushel for grain in towns where the farmers have elevators of their own than where they are alone in the field. "This is done with a view to throttling competition," declared Mr. Smith. "Take my own town Truman, for instance. The line elevators paid 6 cents more in Truman than in a town 18 miles away and nearer the terminals. This was because we had a farmers' elevator company."

He intimated that a bill similar to the one killed in committee at the last session of the state legislature, prohibiting such discrimination, will be introduced at the next session.

R. L. Johnson, secretary of the organization, made his annual report. He stated that many of the farmers don't know the meaning of loyalty. First they go to the competing elevator, get a price on their grain and then go over to their own elevator and

demand a higher price. When they don't get it, they ask, "What's the use of a farmers' elevator, anyhow?"

Fifty local organizations are now members of the state association, making a total representation of approximately 5,000 farmers.

J. R. Dalton, Woonsocket, S. D., receivers' agent and director of the South Dakota Association, reviewed the year in that state.

E. G. Dunn of Mason City, Iowa, receivers' agent, delivered the principal address, his subject being "The Future of the Co-operative Movement."

The Society of Equity companies, formed for the purpose of "bulling" the grain market, were not favored by the Association. The idea was discussed at considerable length, and the general opinion was that storing wheat in the field and selling at a favorable time would not work because of the fact that the country is too large and the movement would have to be too wide to have it become concerted.

Looking to betterment of co-operative movements, the Association passed resolutions recommending that the officers and directors appoint a deputy who shall solicit farmers' elevator companies to join the state association.

One of the resolutions favored the passage of a bill to "compel railroads to furnish cars in good condition," and eliminate the leakage of grain.

The members of the Association were urged to vote for legislators who favor co-operation.

Legislation for uniform prices to be paid for grain in all stations throughout the state, the difference in freight rates to be taken into consideration will be sought. The Association also favored lowering of freight rates on grass seeds shipped in sacks.

The demurrage law also came in for discussion; and after many arguments pro and con it was decided that all the companies in the Association should begin a campaign to raise funds to carry a test case through the courts to force the carriers to furnish a sufficient number of cars properly to handle grain destined from farmers' grain elevators to shipping points.

H. H. Carr of Chicago, once the "farmers' friend" *par excellence* and now called by his rivals a traitor but still president of the National Farmers' Association, was another speaker.

The following officers were elected: President L. A. Smith of Martin County; first vice president, H. R. Hanson, Yellow Medicine; second vice president, D. McTaggart, Redwood; secretary (re-elected), R. L. Johnson, Mower; treasurer, J. F. Delaney, Pipestone. These with William Bennett, Pope county; C. H. Ahles, Chippewa; H. J. Farmer, Pipestone; John Breen, Lyon; John Ingebretson, Rock; E. J. Opliger, Stevens; A. O. Lunder, Murray, and A. Froberg, Yellow Medicine, form the board of directors.

MANITOBA WILL OPERATE ELEVATORS.

The Manitoba government has announced that at the next session of the legislature a bill will be offered that will provide for "government ownership and control of all grain elevators within the province." This announcement was made at a meeting of the Manitoba Grain Growers' Association at Brandon on December 16, by Hon. C. R. Coldwell. On December 14 the Saskatchewan legislature at Regina adopted without a division a resolution by the agricultural committee of the house to the effect "that a commission should be appointed by the government for the purpose of making a searching inquiry into the proposals, looking to the creation and operation of a system of elevators to effect the objects outlined by the Grain Growers' Association and to report its findings with all convenient speed so that action may be taken to give relief to the coming grain season." The legislature of Alberta has rejected a motion to commit the provincial government to the same policy.

Mr. Coldwell is minister of education of Manitoba, and went to Brandon as the representative of the government. He was very deliberate in his speech, approaching his denouement by a gently circuitous route in order to brighten the dramatic effect of the disclosure he had to make, and succeeded admirably. Coming finally to the point, he said:

"Tomorrow (December 17) you are taking up the question which is probably the one of greatest interest to you in connection with your operations. I refer particularly to what is called the elevator question. (Cheers.) In order that you may be able to discuss that question, perhaps with a little more light and satisfaction, I think it is desirable that I should announce something to you in connection with the attitude of the government towards that question. (Hear, hear.)

"Now, things have changed somewhat during the past year since the premiers of the three Western provinces (cheers and laughter) held their convention. (A voice, "Break the news gently.") Give me time and I will break it gently to you. (Laughter.) If you will just listen and do the shouting afterwards it will be better. (Renewed laughter.) I say, things have changed somewhat since the meetings of the premiers and the discussion your joint

associations had with the premiers. Mr. Scott, premier of Saskatchewan, has notified Mr. Roblin, premier of Manitoba, that the arrangements with the three premiers had fallen to the ground and was at an end, and that the provinces in the future in dealing with this matter must act independently.

"Now, that puts somewhat of a different phase upon the question; and I want to say to you here that after a discussion of this matter since that change has taken place, the government of your province has come to the conclusion that the province should take this matter up on its own footing; and I want to make a plain statement to you along the lines of what the conclusion is that we have come to. The government of Manitoba has adopted the policy and has accepted the principle laid down by the Grain Growers' Association establishing a line (cheers)—of establishing a line of internal elevators—internal grain elevators as a public utility—owned by the public and operated for the public. (Long and loud cheers.) And the government is prepared to co-operate with your association in carrying out that policy and working out a plan to that end. (Renewed cheers.) You have no doubt some well defined plan for that purpose, and I am here to ask you on behalf of the government of which I am a member to send a representative committee to meet the members of the government to discuss the proposition in all its details. We ask you to prepare a careful report, giving full details and particulars of your proposal and come to discuss it with the government of this province so that a measure may be prepared for presentation to the legislature soon to meet. (Cheers.)"

The Manitoba legislature will meet in February; and during the interval the Grain Growers' Association's representatives will be expected to unite with the government to work out in a bill a plan for taking over and operating the 696 elevators in the province, valued at \$5,190,000 and having storage capacity of 21,624,500 bushels.

The announcement, needless to say, was enthusiastically received by the farmers. To the grain trade of Winnipeg it came as a "bombshell," the Associated Press reports, "many of the elevator owners being disposed to regard it as tantamount to a confiscation of their property. The farmers have bought a site for an independent exchange building right alongside the present Grain Exchange, and have declared their intention of erecting a building in the near future to concentrate their grain business. It means war and may spell disaster to several of the grain companies, but the farmers demand it and they are the predominating power."

On January 4 the Manitoba cabinet had a conference with the Grain Growers' Association committee, when President McCuaig submitted an outline of a scheme to be embodied in a law to operate the elevators as public utilities. The following, amongst other proposals are made:

That the government should provide with the credit of the province for any expenditure in connection with operation or maintenance. The government would issue debentures payable say in forty years. This would not be too long a period, since there is no doubt that the undertaking would be permanent, and especially since the grain handled is intended not only to bear the cost of maintenance and operating expenses, but to provide a sinking fund as well, to care for debentures at maturity.

That the proposed commission should consist of three members, to be named by board of directors of the Manitoba Grain Growers' Association, and appointed by the government. Their term of office should be for life, consistent with efficient administration and good conduct. In the event of a dismissal, as hereinafter provided, or in the event of the resignation or death of any or all of the commissioners, the appointment or appointments to fill the vacant positions should be made in the same way as the original appointment was made, i. e., named by the board of directors of the association and appointed by the government. The conduct of the commissioners would be subject to investigation by the legislature, with power in the legislature, by a two-thirds vote, to dismiss a member or members of the commission. All accounting and bookkeeping of the commission, both at head office and initial points, should be subject to the examination and report of the provincial auditor.

If the present owners should express a willingness to sell their elevators, the first duty of the commission would be to secure a valuation of the existing elevators within the province. (If the existing elevators are secured, the commission would, as rapidly as convenient, re-arrange them to meet the requirements of the new system, having in view always economical management, the idea being that all grain shipped by individual farmers should be special binned.) In respect to valuation, the purpose should be to arrive as nearly as possible at the actual business worth of the elevators at the present time as a public utility. In arriving at this the following factors would have to be taken into consideration:

(a) Depreciation in value since date of erection.
(b) Volume of business handled, or its value as a going business concern; i. e., many elevators are worth nothing more than their depreciated value,

less cost of removing and re-erecting them in a manner suitable to the needs of the system. (c) Adaptability to meet requirements of a public system; i. e., into this would enter the facilities of elevators, as far as facilities for special binning, cleaning and rapid handling are concerned. (d) Condition of building, foundation, machinery, etc. (e) Rates of insurance and cost of operation. Upon this basis an exact estimate of each individual elevator could be secured with comparatively little cost, and an offer made to purchase upon this basis.

If the existing owners should refuse to sell at the valuation thus arrived at, the commission would proceed to the erection of a new system as rapidly as could conveniently be done. This new system would be uniform in respect to style of construction, machinery, method of operation, etc. It would also be the duty of the commission when they should be securing a valuation of the existing elevators, to secure an estimate of the cost of a new system of elevators suitable to the end for which it would be created. Data could be collected indicating the amount of grain tributary to the different shipping points in the province. The cost of erecting a new system would also be an aid in arriving at a correct valuation of the existing one. In arranging the elevators provision could be made with a particular view to special binning.

The operator in charge of each elevator shall preserve official samples of all grain delivered to the elevator.

The commission would report at regular intervals to the government full information as to the number of elevators in operation, number of employes, quantity of grain handled, revenue received, expenditures incurred and generally all such information as might be deemed necessary. The government would bring this down in a special report to the legislature.

Sufficient traveling inspectors would be appointed by the commission to supervise the working of the elevators.

The operator in charge of each elevator would report daily to the head office the amount of grain he had taken into the elevator, the number of storage tickets issued, the number of storage tickets cancelled or destroyed with their numbers, storage tickets surrendered or exchanged for warehouse receipts, storage collected, grain loaded out with car numbers and amount loaded to each car, and generally all information that the commission might think desirable to secure, in order to have an accurate record of the business done.

It might be added that accurate information as to the receipts at country points would be of valuable assistance to the railway companies in the distribution of their cars.

A certain part of the revenue might be set aside each year to provide a pension fund, in order that employes, after the termination of a certain period of service, would have a yearly pension, the purpose being to secure the right men and keep them.

The necessary legislation should be enacted at the coming session of the legislature.

This scheme was gone over in a general way, and at the conclusion of the conference the premier said it would be "taken under advisement."

A. R. Clark, for many years a member of the Board of Trade of Wichita, Kan., died suddenly of heart failure at his home in that city recently. He awoke early in the morning complaining of a pain over the heart after spending the previous evening at a theatre. He is survived by a widow and two children.

Philip P. Park, of Bartley, Butler County, Pa., one of the most prominent feed and grain dealers in that vicinity, dropped dead of apoplexy recently while talking to a neighbor. He had just remarked that he had not felt better in his life when he was seized with the fatal stroke. Decedent was 64 years old and is survived by a widow and three daughters.

George W. McNear, millionaire grain merchant and one of the best known wheat exporters in California, died on December 29 at Oakland, Cal., after an illness extending over two years, aged 72 years. He had resided in California since 1860. He was the principal stockholder in the firm of George W. McNear, Inc., which he founded in 1870. It was largely through his efforts that the old San Francisco Produce and Merchants' Exchanges were consolidated as the Merchants' Exchange, of which he was twice elected president. He was the principal stockholder in the Port Costa Water Co., the Port Costa Mill Co., the Port Costa Warehouse at Port Costa, Cal., and the Arcadia Real Estate Co., Arcadia, Cal. He was born in Wiscasset, Me., on March 27, 1837, and received his early education in the public schools of that town. At the age of fifteen he went to sea and for six years commanded sailing vessels and steamers on the Mississippi Sound. Later he moved with his family to New Orleans, La., and thence to California in 1860. With his brother he started in the commission business in Petaluma. In 1870 the partnership was dissolved and he started in the grain business in San Francisco. He left property in Vellejo, Cal., worth \$350,000.

OBITUARY

Samuel Williamson, a grain dealer of Salt Lake City, Utah, died in Pasadena, Cal., recently. Burial was in Salt Lake City.

Frank I. Cardo, well known among grain and stock traders, died at his residence, 4508 Forrest-ville Ave., Chicago, recently, after a brief illness.

John H. Donnelly, a traveling solicitor in the employ of John McLeod & Co., Minneapolis, died recently. He had long been identified with the grain trade.

William W. Marcy, an old resident of Chicago, and father of George E. Marcy, president of the Armour Grain Co., died on January 4 in that city at the age of 77 years.

L. David Cox, a former resident of Easton and Mason City, Ill., where he was engaged in the grain business and blacksmithing, died at Teheran, Mason County, Ill., recently of Bright's disease, aged 56 years.

Robert A. Abbe, a grain dealer, died at his home in Windsor Locks, Conn., recently, from a heart affection. He was born in 1848 and died in the same house in which he was born. He is survived by a widow, one son and one daughter.

John J. McDermid, aged 73 years, a former member of the Chicago Board of Trade, and prominently connected with the rye trade for a long period, died recently in that city. He is survived by two sons, who are members of the Chicago Board of Trade.

Albert J. Hough, for some years a member of the Chicago Board of Trade, died recently at the residence of his sister, Mrs. E. D. Kimball, 4828 Kenwood Ave., Chicago. He was for many years in the banking business with his father, the late O. S. Hough.

William R. Hammond, president of the Third National Bank of Baltimore, Md., and member of the Baltimore Chamber of Commerce, died of heart failure on December 19. He was formerly a member of the grain exporting firm of Hammond, Snyder & Co., Baltimore.

J. M. Long, an elevator manager, was killed on the C. & M. & St. P. Ry., at Waubay, S. D., recently. It is believed he was struck by one train and then when he attempted to attract some one's attention, he was struck by a second train. He leaves a widow and several children.

Noble Jones, at one time a prominent member of the Chicago Board of Trade, and head of the firm of Noble Jones & Co., died recently at Minooka, Ill. He was once one of the largest grain receivers in the trade and is said to have originated the system of through billing.

Henry Stolz, for twenty-five years associated with various firms of the Chicago Board of Trade, and for the last three years connected with Brousseau & Co., commission brokers, died recently at his residence, 5322 Lakewood Ave., Chicago, aged 56 years. He was born in Milwaukee, Wis. He is survived by his widow.

Capt. T. S. Gilliland, for many years in the grain and produce business, died on December 30 at his home in Van Wert, Ohio, aged 75 years. He was mayor of Van Wert two terms, was a promoter of the city park system and filled important corporation offices. He was captain of Company H. Fifteenth O. V. I., in the Civil War, was commissioned Colonel of the Fourth Regiment, Ohio Militia, and had been a Mason since 1857. He is survived by a widow and two sons.

Edward C. Chamberlin, of the grain and provision firm of E. C. Chamberlin & Co., of St. Louis, Mo., and for forty years a member of the Merchants' Exchange of that city, died at Webster Grove, Mo., recently, aged 67 years. He was born in Lyndon, Vt., in 1842. In 1866 he entered the employ of S. M. Edgell & Co., pioneer grain and provision merchants of St. Louis. He soon became a partner in the firm and on the death of Mr. Edgell, organized the firm of E. C. Chamberlin & Co. He had been a member of the Pilgrim Congregational church, St. Louis, for forty-three years. He is survived by five daughters and three sons.

Daniel S. Mills, president of the D. S. Mills Hay & Grain Co., former director in the First National Bank, and prominent churchman of Louisville, Ky., died in a hospital in that city on December 26 after a lingering illness. He was 77 years old. He was born in Smithtown, L. I., N. Y., his ancestors having been among the early English settlers. He started life as a clerk in a mercantile house in New York City. Later he went to Henryville, Ind., where he established a sawmill and operated it until 1860, when he went to Louisville. He became associated with the grain and feed firm of Verhoff & Co. of that city, later becoming a member of the firm of Duckwall & Mills. The firm failed. The hay and grain company of Clark & Mills was soon thereafter organized. Decedent leaves no family, but is survived by two brothers, both of whom live in New York.

Cold Air Driers

¶ The ELLIS COLD AIR DRIER has passed the experimental stage. A large number of these machines are now running night and day WITH MORE THAN SATISFACTORY RESULTS.

¶ No steam power necessary; electricity or gas engines will operate them successfully.

¶ Moderate cost.

¶ Quick delivery.

¶ Can be installed in the elevator with little expense and with no additional charge for insurance.

The Ellis Drier Co.

Postal Telegraph Bldg.

Chicago

FIRES-CASUALTIES

A shaft broke in the elevator head at the Baldwin Elevator in Ivesdale, Ill., recently.

The elevator at the Heiligenstein Mill at Freeburg, Ill., caught fire recently, resulting in a damage of about \$200.

The elevator of the M. D. King Manufacturing Co., at Pittsfield, Ill., was damaged by fire to the extent of \$75 recently.

The elevator at Lowell, Kearney County, Neb., owned by Frank F. Roby, of Kearney, Neb., was destroyed by fire on December 9.

Three carloads of wheat were destroyed by fire in the yards of the Chicago & Northwestern Railway Co. in Chicago on December 22. The loss was \$10,000.

Fire at Bradshaw, the first station west of York, Neb., destroyed the elevator of the T. B. Hord Grain Co., of Central City, Neb., together with about 5,000 bushels of grain.

The elevators of the St. Anthony & Dakota Co., and W. C. Graham at Manitou, Monticello County, N. D., with 10,000 bushels of wheat, were destroyed by fire recently. Loss \$10,000.

The Acme Elevator Co.'s house at Belmar Siding, five miles north of Willow City, N. D., was destroyed by fire recently. Several thousand bushels of wheat and a car containing 5,000 bushels were burned.

Fire of mysterious origin destroyed the Northern Elevator Co.'s structure at Windthorst, Sask., Can., recently. It contained about 20,000 bushels of grain. A car of grain standing on the railroad track was also consumed.

The big grain elevator at Elk Horn, Shelby County, Iowa, owned by G. H. Bunton, of Atlantic, Iowa, and containing 3,000 bushels of grain was destroyed by fire recently. Loss \$5,000, fully insured. The elevator will be rebuilt.

Fire which threatened to destroy the entire business district burned the Fillinger-Gordon-Detwiler Co.'s Elevator containing much grain, at Henderson, Mich., recently. Loss \$8,000, partly covered by insurance. The house will be rebuilt.

Fire supposed to have been caused by a cigarette destroyed the Robinson Bros.' Grain & Hay Warehouse at Shreveport, La., on January 1, entailing a loss of \$2,000, with no insurance. Two adjoining buildings were also consumed, causing a combined loss of \$8,000.

Fire originating in the office and engine room of the Empire Elevator Co., at Milbank, N. D., and discovered by an employe, was extinguished before it had gained much headway by the prompt arrival of the fire department. The interior and wiring of the structure were slightly damaged.

Fire originating from a defective chimney in the elevator owned by the B. P. Hill Grain Co., at Haldane, Ogle County, Ill., destroyed the building with contents recently; loss between \$4,000 and \$5,000. A fire brigade fought the blaze. The capacity was 10,000 bushels. It will be rebuilt.

The large elevator of the Central Granaries Co., at Rockford, Gage County, Neb., burned recently, entailing a loss of about \$7,000; partly insured. A car load of corn on a side track was also burned. It is believed the blaze originated from sparks from a locomotive. The house will be rebuilt.

Fire which originated in the office of the Klauser Elevator at Sherwood, N. D., recently was prevented from developing into a disastrous blaze by the timely arrival of two chemical engines. The fire was caused by the heating of the timbers through the iron sheeting between the wall and a stove.

Fire which started in and destroyed the Farmers' Elevator at Renville, Minn., recently also communicated to the William Hoffman elevator adjoining and consumed that structure. The Farmers' Elevator was well insured, but little insurance was carried on the Hoffman Elevator. The latter will be rebuilt.

The Emil Nelson Elevator at Souris, N. D., was destroyed by fire believed to have started from the office coal stove recently. The coal sheds of the Imperial Elevator Co. were also consumed. The Nelson Elevator was valued at \$7,000, with \$4,500 insurance. The house contained about 500 bushels of wheat.

The large elevator of the Farmers' Grain & Live Stock Co. at Oakland, Neb., was destroyed by fire on January 4. There were about 13,000 bushels of grain in store. The building was valued at \$5,000 and contents about the same, partly covered by insurance. The only cause assignable is spontaneous combustion.

The German steamer Utgard, en route from Portland, Ore., for Europe, with a cargo of grain, is reported to have gone ashore at Boxa Point, near Punta Arenas, in the Strait of Magellan recently. The steamer, which was of steel construction, is reported to have broken in two and is a total loss. Her cargo consisted of 210,826 bushels of wheat. A

peculiar coincidence in the wreck of the Utgard is the fact that about a year ago the German steamer Wangard, sister ship of the Utgard, was lost while en route from Tacoma to Europe with a cargo of grain.

The working house of the Rogers Grain Co.'s Elevator at Harvey, Ill., burned to the ground on Christmas morning, but the tile storage tanks remain intact. Loss about \$100,000, with \$73,000 insurance. The house was one of the most modern in the vicinity of Chicago. It was operated entirely by electric power. It will be rebuilt.

What is believed to have been a spark from a passing locomotive caused a fire in the Claude E. Sims Grain Co. plant at Atlanta, Ga., recently, which resulted in damage to building and stock of between \$5,000 and \$6,000. The plant was practically consumed. Owing to the location of the fire the firemen were helpless to control the blaze. Insurance about \$1,000.

The new National Elevator at Langdon, N. D., which was completed a short time ago, containing grain valued at \$12,000, burned to the ground recently. There is a suspicion that the fire was of incendiary origin, as but little grain had been handled for a week, and the machinery had been in motion scarcely an hour on the day previous. The fire was discovered in the lower part of the main building. The loss on building and contents is about \$18,000. The building cost \$6,000. This is the third fire the plant has experienced within a few years. It has not been decided whether to rebuild.

THE BARLEY SITUATION.

In discussing the barley situation during 1909, Wm. H. Prinz in the American Brewers' Review, among other things says:

"We have learned that the Government crop reports, which are of the utmost importance to our trade, are absolutely unreliable and incorrect. When three years ago the maltsters realized that the Government had overestimated the barley crop by very close to 50,000,000 bushels, they rushed in and 'boosted' the price of barley beyond all reason. This raise in price has done more damage than can be calculated. Besides the material loss, which goes into millions, it has created distrust between the brewers and the maltsters. It is a cause of the hand-to-mouth policy practiced by the consumers of malt which should not and cannot be carried on in the future, and the brewers will find this out sooner or later. It has spoiled the farmers. When the present price for barley is offered them, they are not satisfied and either give up barley raising, or care nothing about taking care of the barley when harvested, and even now are speculating in the same, which is clearly shown by the smallness of the receipts. There are many other causes, but I must reserve them for an article on the foolishness of the hand-to-mouth policy. All this trouble was caused by the overestimating of the crop and the foolish anxiety of a few men who thought they knew all about the malting business.

"Then came the year of 1908, with another overestimated barley crop, and a short oat crop, and it happened that screenings sold higher than malting barley. Anything of light weight in barley brought better prices than malting barley. Can you blame the farmers, then, for not taking care of their barley? In the 1908 crop, however, was some good malting barley, but before the season was over, many maltsters were forced to shut down, for the want of barley to malt.

"Then the crop of 1909—a crop very much mixed, light-weight, and much totally unfit for any use, except for hog feed. The weather conditions were such that much barley did not ripen properly when in the milky stage, which is the case with much of the greenish-looking barley. I think that only about one-fourth of the crop is malting barley, and that in order to get it up to weight, the loss in screenings will be from 10 to 20 per cent.

"Now, how did all this trouble come about? Only through overestimating of the barley crop by the Government. I admit, barley is a hard crop to estimate, as weather conditions during the time the barley is in the milk and during and after harvest make or destroy the crop, but the final estimate should be nearly correct.

"How does the Government estimate the crops? It was described in one of the Chicago daily papers recently in an article by Philip R. Kellar. The heading of the same is as follows: 'Work for Uncle Sam for Nothing, Gathering Data for Crop Report.' That tells the whole story. Did you ever get anything for nothing? There are over 3,000 agricultural counties in the United States, and in these counties 30,000 crop estimators are at work, who are mostly postmasters and small storekeepers who get all their information by hearsay and never see a barley field. These correspondents send their reports to Washington where they have 'expert' clerks who compile, condense and analyze it. Can you wonder why our estimates are wrong? We should be ashamed of ourselves before the rest of the world for letting such conditions go on year after year."

CROP REPORTS

After a short trip through the state E. J. Smiley, Secretary of the Kansas Grain Dealers' Association, asserts that in the northeastern part of the state fully 30 per cent of the corn crop is still in the field.

The six New England states produced 8,715,000 bushels of corn on an acreage of 231,000 in 1909, according to the final report of the Secretary of Agriculture, compared to 8,799,000 bushels for 1908.

The corn yield in Missouri, Kansas and Nebraska for 1909 showed a slight decrease compared with 1908. The total acreage in 1909 was 23,675,000, with yield of 562,125,000 bushels, while the production in 1908 was 565,601,000 bushels.

The corn production in the five North Atlantic states for 1909 shows a decided decrease compared to 1908. The corn acreage in 1909 was 3,385,000, with 110,583,000 bushels production, while the production in 1908 was 123,034,000 bushels.

The five Central states, Ohio, Indiana, Illinois, Michigan and Wisconsin, were much more productive in corn in 1909 than in 1908. The total acreage in 1909 was 22,597,000, with yield of 839,891,000 bushels. The total yield in 1908 was 683,224,000 bushels.

The corn production in the six southeastern states for 1909 shows a slight increase over that of 1908. According to the Government report the acreage in these states in 1909 was 13,101,000, with yield of 230,226,000 bushels, while the yield in 1908 was 213,741,000.

Because of the recent cold spell and snowfall in Texas record-breaking winter wheat and oats in that state are looked for next summer. The acreage for the crop of 1910 is estimated to be at least 10 per cent larger than that of 1901, the banner year in the history of Texas.

The six Southern states of Kentucky, Tennessee, Alabama, Mississippi, Louisiana and Texas had a total corn acreage of 23,562,000, with yield of 439,961,000 bushels in 1909, compared to a yield of 494,329,000 bushels in 1908, according to the final report of the Secretary of Agriculture.

The official report of the Ohio Department of Agriculture on the condition of corn, issued January 1, 1910, shows corn in crib compared with average years 97 per cent; condition in shock compared with average years 93 per cent; amount not yet husked 12 per cent; amount of corn that will be fed on the farm 77 per cent.

Late reports received by Pope & Eckhardt Co., commission merchants, Chicago, estimate that approximately 40 per cent of the corn has not been husked in Iowa, similarly unfavorable conditions prevail in Northern Nebraska, and in Illinois 20 to 25 per cent is also yet in the fields, mainly in the northern part of the state. These unfavorable conditions are attributed to bad weather and difficulty in securing labor.

According to the crop report issued by the Department of State the total number of bushels of wheat marketed by Michigan farmers during December, 1909, at 122 flouring mills was 174,130 and at 96 elevators and to grain dealers 139,055, or a total of \$13,185 bushels; sixty-six mills, elevators and grain dealers report no wheat marketed in December. According to 487 correspondents wheat did not suffer from any cause during December, while 17 correspondents asserted it did.

Indiana increased its corn crop by 58,865,000 bushels during 1909, largely due to improved methods. A part of this result is attributed to the special trains that were run through the state by the experiment station at Purdue University. Instruction was given as to the best kind of corn to cultivate and what constituted the quality in corn that was worth the labor and expense of all the fertilization and cultivation that had been urged. Increased returns justified the increase in expense to the grower.

The final report of the Secretary of Agriculture gives the corn area in Illinois as 10,300,000 acres, from which has been produced practically 370,000,000 bushels. This acreage represents the first time that any state has run its total into eight figures. Iowa, its nearest competitor, produced 80,000,000 bushels less. In 1908 the corn production of Illinois was 298,620,000 bushels. In 1909 its wheat acreage was 1,810,000 and production 31,494,000 bushels, while in 1908 the production was 30,212,000 bushels.

The state average for the various Oklahoma crops in 1908 shows corn 18.16 bushels, wheat 9.5 bushels, oats 13.1 bushels, barley 55 bushels, rye 6 bushels, Kafir corn 9.2 bushels, broom corn 21 tons. The total acreage of corn in 1909 was 4,284,561, and the yield 79,763,346 bushels. Nine counties had more than 100,000 acres in corn. The acreage of wheat was 1,408,859, with 13,471,420 bushels yield. The oats acreage was 586,668, with yield of 7,725,757. The barley crop was valued at \$99,067; rye, \$19,203; Kafir corn, \$2,548,200; alfalfa, \$2,043,966.

Send us the grain news of your neighborhood.

LATE PATENTS

Issued on December 14, 1909.

Alfalfa Cutter.—Jorgen Jorgensen, South Omaha, Neb. Filed December 2, 1908. No. 943,308.

Grain Car Door.—W. A. Ascue, Kiowa, Kan. Filed July 2, 1908. No. 942,994. See cut.

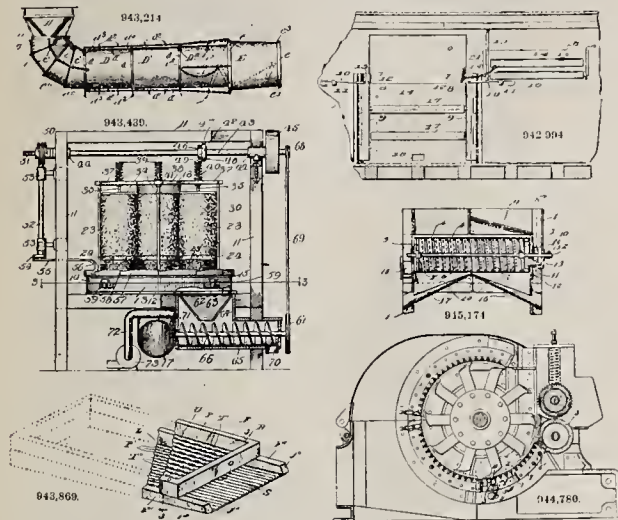
Dust Collector.—O. M. Morse, Jackson, Mich. Filed January 9, 1905. No. 943,439. See cut.

Grain Spout for Portable Elevator.—G. W. and C. D. Baier, Cissna Park, Ill. Filed July 11, 1908. No. 943,214. See cut.

Issued on December 21, 1909.

Conditioning and Tempering Corn for Degermination and Milling.—John B. Watkins, St. Louis, Mo., assignor of one-half to the Essmuller Mill Furnishing Company of St. Louis. Filed December 31, 1908. No. 943,722.

Corn Grader.—James E. Gaston, Cochran, Pa. Filed September 28, 1909. No. 943,869. See cut.



Grain Door.—Geo. G. Newman and Wesley Rowe, Bismarck, N. D. Filed September 10, 1908. No. 943,992.

Issued on December 28, 1909.

Car Mover.—F. C. Bailey, Rib Lake, Wis., assignor of one-half to Elliot C. Getchel, Rib Lake, Wis. Filed March 17, 1909. No. 944,763.

Grinding Surface or Cage.—E. H. Frickey, St. Louis, Mo., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo. Filed May 18, 1908. No. 944,780. See cut.

Wheat Scouring Machine.—Matyas Schiebendrein, St. Louis, Mo. Filed March 10, 1909. No. 944,510.

Issued on January 4, 1910.

Baling Press.—J. S. Tuttle, Kansas City, Mo., assignor of one-half to George Ertel Company, Quincy, Ill. Filed June 29, 1908. No. 945,114.

Grain Car Door.—W. S. Driskell, Gretna, Neb., assignor of one-third to Hans Peters and one-third to Elmer S. Clarke, Gretna, Neb. Filed May 17, 1909. No. 945,381.

Seed-Corn Sorter.—O. L. Larson, Minneapolis, Minn. Filed July 13, 1907. No. 945,174. See cut.

Roasted Sulphurized Grain.—Edward Meyer, Friedrichswerth, Germany. Filed January 2, 1908. No. 945,567.

Grain Separator.—H. A. Campbell, River Falls, Wis. Filed August 24, 1908. No. 945,487.

Wheat Heater.—J. G. Hagman, La Crosse, Wis., assignor of one-half to George M. Heath, La Crosse, Wis. Filed September 13, 1909. No. 945,089.

Albert M. Read has succeeded Walter C. Reid as secretary of the American Warehousemen's Association with offices at 140 Fifteenth street N. W., Washington, D. C.

Sec'y Smiley of Kansas notifies members of that association that Sec. 3 of the new uniform bill of lading provides that claims for loss and damage must be made in writing to the carrier at point of delivery, or at point of origin, within four months after the delivery of the property. Unless claims are so made the carrier shall not be liable. The F. C. A. of the U. P. Ry. Co. has refused to consider claims if not filed within the time provided for in the B/L. See to it, therefore, that all claims are presented to the freight claim agents as soon as possible after receiving account of sales.

HISTORY OF MAY CORN

My "History of May Corn" Circular B gives exhaustive data, covering the fall marketing season and the question of the ultimate value level.

E. W. WAGNER

98-99-100 Board of Trade CHICAGO

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Medium and Mammoth Clover Seed, free from Buckhorn.

NATHAN & LEVY, Fort Wayne, Ind.

HOT AND DAMAGED CORN WANTED.

We will buy hot and damaged corn of every description. Name prices.

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This year try oats raised in the hardy Northwest climate. It is heavy, clean, and rust resisting.

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We want clover seed, any quality or condition. Buck horn lots a specialty. Send fair average samples with bottom prices or ask for bids.

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FLOUR AND MILL FEEDS.

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products.

ANSTED & BURK CO., Springfield, Ohio.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

FOR SALE.

A 12-horsepower St. Marys Gas and Gasoline Engine, practically new. Complete with standard equipment. Bargain price. Address

JASPERSON SUPPLY CO., St. Marys, Ohio.

FOR SALE.

Elevators in Illinois and Indiana that handle from 150,000 bushels to 300,000 bushels annually. Good locations. Prices very reasonable. Address.

JAMES M. MAGUIRE, Campus, Ill.

OKLAHOMA GRAIN ELEVATORS.

Exceptional bargains in Oklahoma grain elevators located at Rocky, Cordell, Bessie, Thomas, Longdale, Bridgeport, Alva, Enid, Lahoma, Waukomis, Billings, Stillwater, Mehan, Glencoe, Salt Creek, Foraker, Tullahassee, Boynton. Fine openings for good business this fall. Be quick and get in touch with

WEATHERWAX & CO., 9 East Dewey St., Sapulpa, Okla.

FOR SALE.

I will sell my modern, galvanized-iron-covered elevator, feed and meal mill and warehouse at Claude, county seat Armstrong County, Panhandle, Texas. Only one in county; on private switch Ft. Worth & Denver R. R.; the best grain section. Lot is 250x250 feet, three squares from court house. This is a money maker, with great, growing business. Will accept part cash and part good real estate or merchandise. Address, at once,

J. M. HARTE, Wabash, Ind.

FOR SALE.

For sale, a 200-bbl. roller flouring mill complete with elevator in best of spring wheat section. Steam power, electric lights, etc., and everything first class. Price \$12,000, one-half cash, balance easy terms.

TINSLAR LAND CO., Drayton, N. D.

FOR SALE.

Small line of elevators, doing a good business, in the best part of southern Minnesota where crop prospects never looked better at this time of year. Reason for selling, too much other business to attend to. Address

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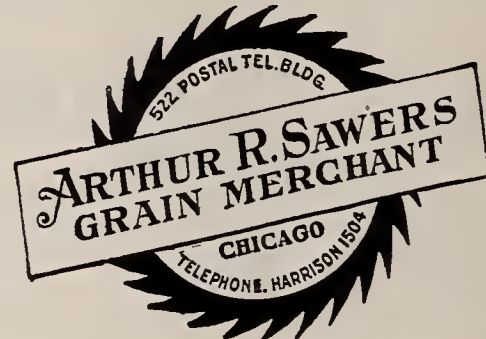
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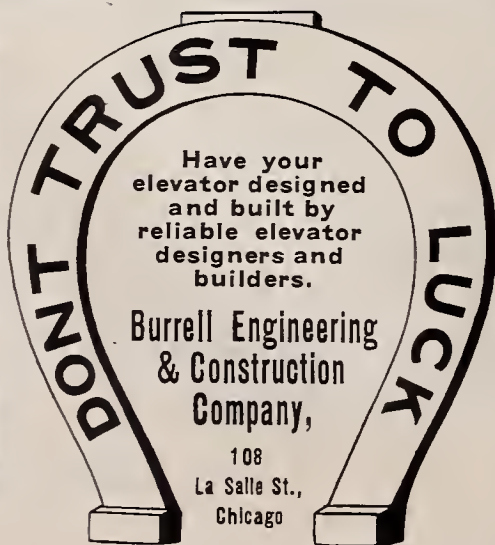
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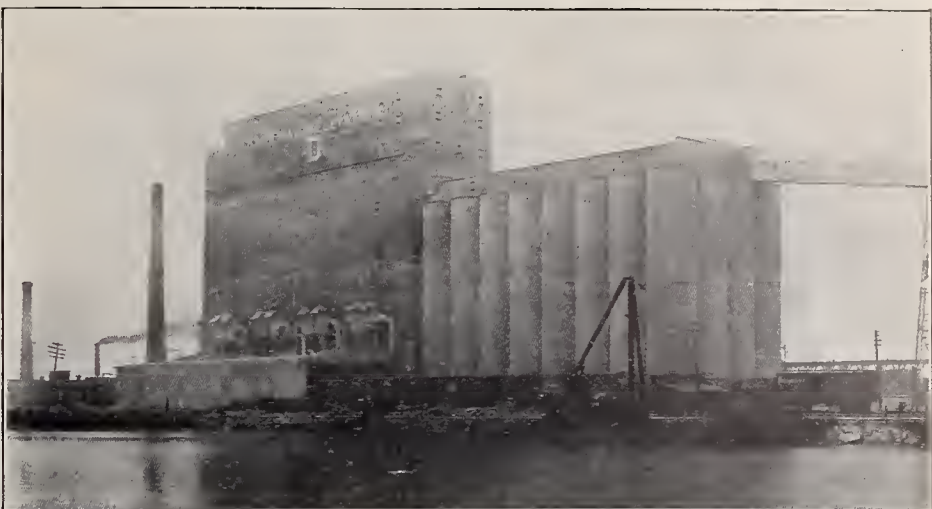
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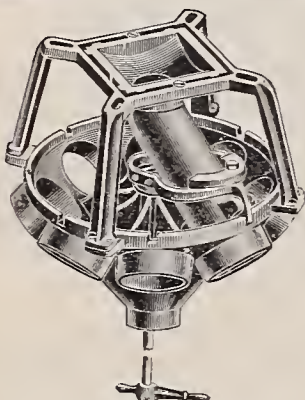
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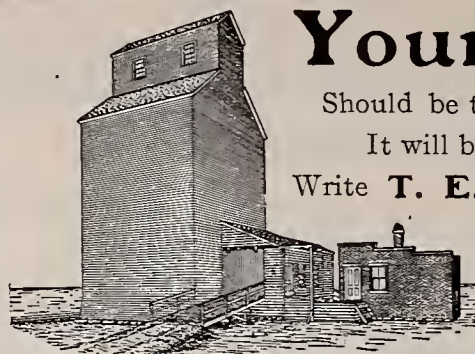
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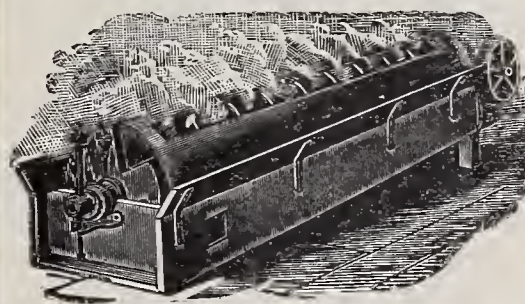
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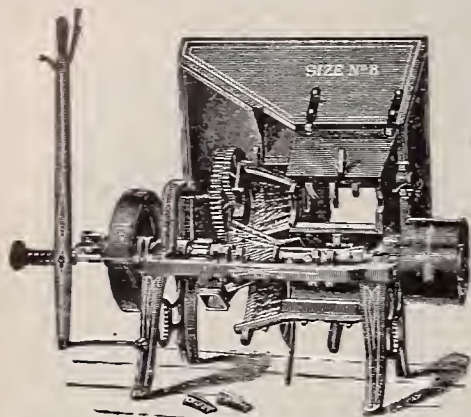
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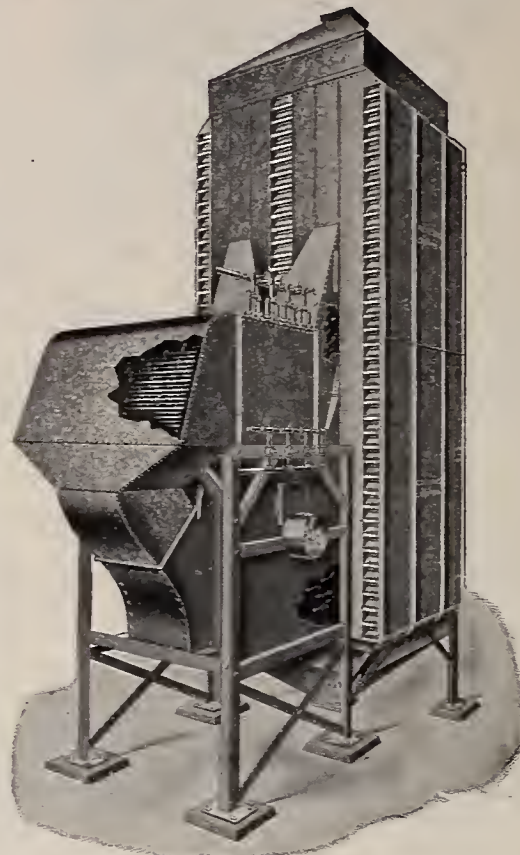
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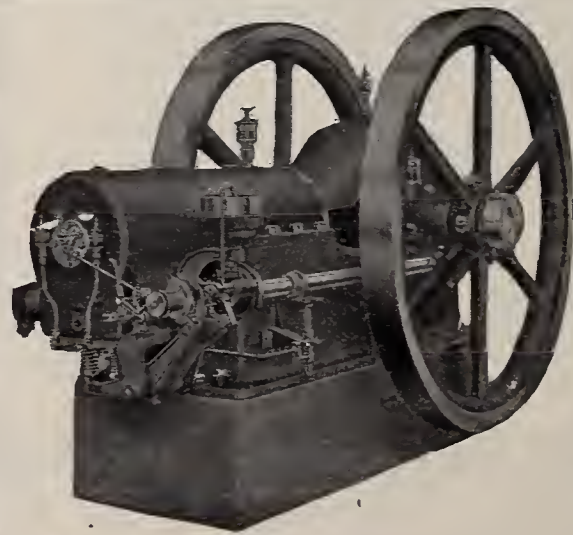
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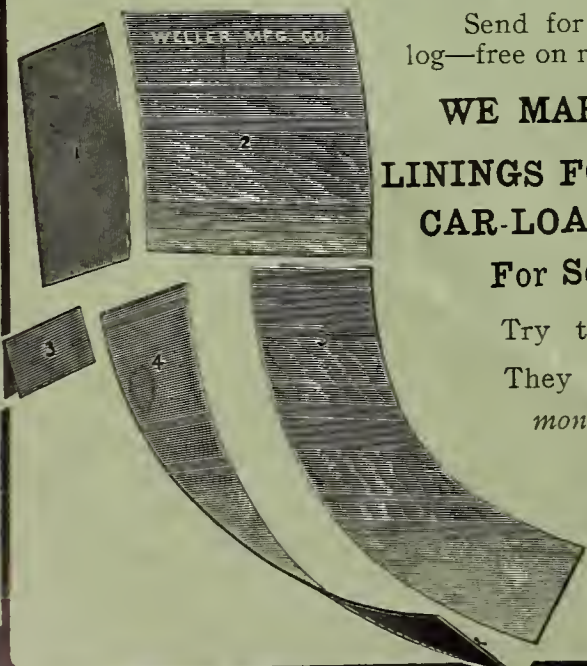
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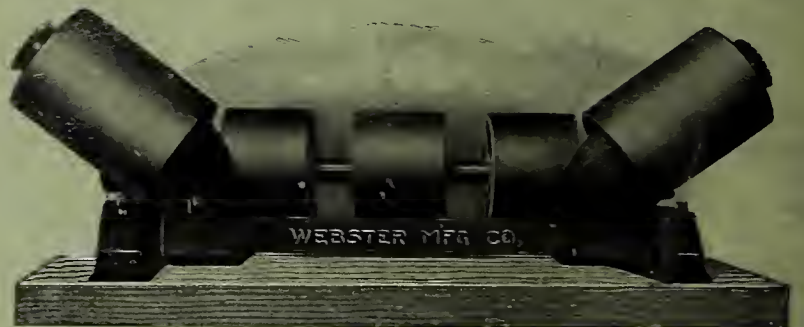
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